

HYDRO TASMANIA annual report 08



Our people - creating a sustainable future



“I am often inspired by the depth of talent we have and feel privileged working in that environment”



“The world is changing before our very eyes and energy issues are at the core of these changes”



“I get to work on the leading edge of very complex and important public policy issues”



“Hydro Tasmania is poised to capture the benefits as the true value of renewable energy is realised”



Our people - creating a sustainable future

highlights of 08



Electricity supply to Tasmania is maintained during severe drought - Basslink and Bell Bay Power Station play key roles



\$270 million equity injection improves balance sheet; includes \$50 million boost for investment in Roaring 40s growth



Profit after tax of \$158.9 million due to increased value of assets; operating loss of \$58 million better reflects impact of low inflows



Capital expenditure of \$54.9 million on our operations



Climate change strategy released - set target of becoming first carbon neutral generator in Australia by 2012



1000 gigawatt hours project under way to develop increased capability from hydro generation

challenges of 08



Operational and financial pressures as a result of ongoing drought - third driest year since the 1966-67 drought



Reliance on Basslink with over 2264 GWh of net import



Environmental risks as a result of low rainfall, particularly at Great Lake



Attracting and retaining staff with the right skills





Hydro Tasmania Consulting's new Cambridge home opened - the first Five-Star Green Star office building in the State



\$22.6 million cost savings embedded into future budgets



Significant increase in staff engagement. Hydro Tasmania now rated among high-performing businesses nationally



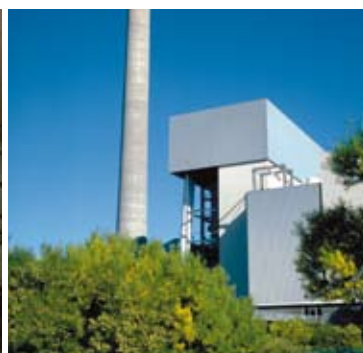
Career path for technicians embedded



Cloud seeding impact report for West Coast released




Lake Margaret Power Station redevelopment approved






Improving safety culture across the business



Increased greenhouse gas emissions from operation of the Bell Bay Power Station



The direction of national energy policy - uncertainty about emissions trading and commitment to renewable energy



Embedding sustainability principles across the business

DIRECTORS STATEMENT



To the Hon David Llewellyn MHA,
Minister for Energy and Resources,
in compliance with requirements of
the *Government Business Enterprises
Act 1995*.

In accordance with Section 55 of the
*Government Business Enterprises
Act 1995*, we hereby submit for your
information and presentation to
Parliament the report of the
Hydro-Electric Corporation for the
year ended 30 June 2008. The report
has been prepared in accordance
with the provisions of the *Government
Business Enterprises Act 1995*.

D M Crean
Chairman Hydro-Electric Corporation
22 October 2008

V J Hawksworth
CEO Hydro-Electric Corporation
22 October 2008

Hydro-Electric Corporation
ARBN 072 377 158
ABN 48 072 377 158

Our Vision

To be Tasmania's world-renowned renewable energy business

Our Mission

Hydro Tasmania will create a sustainable future and increase the value of our business through:

- › world-class asset and resource management
- › building our financial strength and delivering sustainable returns to our owners, the people of Tasmania
- › developing new renewable energy projects
- › being the premier employer of the most capable people in our industry
- › product innovation for customers in consulting, electricity and green markets
- › becoming the first carbon neutral generator in Australia
- › being easy to do business with

Our Values

- › We always behave with honesty and integrity
- › We work together, respect each other and value our diversity
- › We strive to deliver outstanding service
- › We are committed to creating a sustainable future
- › Our positive and determined approach ensures our success

Contents

Chairman's review	2
Chief Executive's report	5
OUR PERFORMANCE	9
Economic Performance	11
2007-08 financial results	11
Long-term business value	12
Growth and customers	13
Assets and Resource Use	16
Asset management	16
Asset and public safety	17
Resource use	18
Governance	21
OUR PEOPLE	23
Employees	25
Attraction, capability and retention	26
Safety, health and wellbeing	29
External Stakeholders	32
Community engagement and support	33
Suppliers and partners	36
OUR ENVIRONMENT	39
Ecosystems and Heritage	41
Ecosystems	42
Aquatic program	42
Land management	44
Heritage	45
Environmental incidents	46
Climate Change	47
Climate change response strategy	47
Carbon Status	50
OUR SUSTAINABILITY	57
Framework	59
Assessment	59
Performance	59
Sustainability Performance Summary	61
GRI Index	63
Independent Assurance Statement	65
OUR BUSINESS	67
Hydro Tasmania's Profile	69
The Board	72
Board committees	74
Executive Team	76
Statement of Corporate Intent	78
Strategic direction	80
Balanced scorecard	81
Roaring 40s	83
ABOUT THIS REPORT	85
FINANCIAL REPORT	89
Statistics	153
Glossary	156
Feedback form	157



DAVID CREAN

TIME WITH HYDRO
TASMANIA
4 years

POSITION
Chairman

“Poor rainfall and continued drought conditions have seen Hydro Tasmania experience another challenging and difficult year.”



CHAIRMAN'S REVIEW



“The last 12 months have proved once again the importance of having a dedicated, innovative and highly-skilled team to meet the difficult challenges thrown at us and ensure our long-term success as a business.”

Poor rainfall and continued drought conditions have seen Hydro Tasmania experience another challenging and difficult year.

Inflows into hydro storages for 2007-08 yielded only 7158 gigawatt hours (GWh) of electricity, or 79 per cent of what was expected and a long way short of the State's annual electricity demand of 10 500 GWh. The period from the end of October to the end of May was the driest in the last 75 years with storages dipping to 16.5 per cent in early June, the lowest they had been in 40 years. This followed the second lowest inflows on record in the previous year of just 6631 GWh.

When the past two years of poor rainfall are considered in the context of a decade dominated by below average inflows, it is clear that climate change is having a significant impact on Tasmania's rainfall patterns. The impact of climate change is also being more widely recognised, motivating political and community action and support for policies that will recognise the true value of our renewable energy generation capability.

Value of Basslink

Once again Basslink has demonstrated its value in enabling Hydro Tasmania to make up the significant shortfall in electricity generation needed to meet Tasmania's energy demand. Imports across Basslink and power generated by the Bell Bay gas-fired power station, as well as much-needed late rain in June, saw hydro storages finish the year at 19.1 per cent of capacity, only marginally lower than the previous year.

However, this came at a considerable additional cost to Hydro Tasmania. The purchase of gas and importing greater amounts of electricity at higher than budgeted prices across Basslink, as well as reduced export revenue across the link, had a significant adverse impact on our financial performance.

The resulting detraction from our 2007-08 budget target was around \$120 million, with net cash from operating activities being just \$24.9 million. This was on top of the \$100.6 million adverse impact in 2006-07. In other words, had our system received average rainfall over the past two years, our cash generation would



Great Lake

have been improved by over \$200 million, with a proportionate improvement in our debt position.

The paradox of rising profit and reduced cash flow, which I referred to in last year's annual report, is evident again this year as a result of the requirement, under international accounting standards, to bring non-cash items such as fair value asset gains onto the profit and loss operating statement.

Our result from operating activities is a loss of \$58 million; however our net profit after tax for this year is \$158.9 million, compared to \$79.4 million in 2006-07. The reported profit is entirely due to non-cash fair value increases. In other words, the value of our assets and the overall business is increasing in spite of poor cash flow resulting from our hydrological situation.

Poor cash flow has adversely affected our debt level and Balance Sheet, which had been overburdened with debt since the old Hydro-Electric Corporation was disaggregated into three separate businesses in 1998. While higher debt levels were manageable in the context of a generator supplying energy to the Tasmanian market

exclusively, these levels were no longer appropriate once Hydro Tasmania began trading in the National Electricity Market (NEM) in 2005 and investing in growth opportunities such as its joint venture vehicle Roaring 40s.

Equity injection

It was, therefore, welcome news that after extensive analysis by independent advisers of Hydro Tasmania's capital structure, the Tasmanian Government in May agreed to provide an equity injection of \$220 million, in addition to \$50 million provided for immediate growth opportunities through Roaring 40s.

This has reduced our net debt to \$878 million at the end of the financial year and has enabled Hydro Tasmania to maintain its 50 per cent share of Roaring 40s with the CLP Group, thereby preserving the significant value in this company.

The equity injection also enables Hydro Tasmania to pursue its business strategy and work towards its long-term sustainability. Our commitment to sustainability is a core value of Hydro Tasmania and we continue on the journey we began in 2004 to embed

sustainability principles into our business practices and activities as well as our decision-making processes.

An example of this is how we are responding to below average rainfall as part of our strategic response to climate change. Although we as an organisation have no control over changing rainfall patterns, we can add to the renewable output of our system by investing capital in our existing assets and looking for new opportunities to recover more energy from these assets. The 1000 Gigawatt hour (GWh) project announced in May is a long-term plan to maximise the renewable energy capability of Hydro Tasmania's system and deliver long-term value to the business.

Climate change

This project along with our continued commitment to building wind farms in Tasmania and mainland Australia through Roaring 40s are key components of our mitigation strategy against continuing below average inflows, and our strategic response to climate change.

As Australia's largest renewable energy business and the nation's



largest manager of water, Hydro Tasmania is well positioned to develop business opportunities around climate change - the biggest environmental challenge of our time - and at the same time assist governments and communities in Australia and Asia to mitigate and deal with the consequences of this challenge. During the past year Hydro Tasmania Consulting has been actively growing its business around climate change and water opportunities in Australia and Asia while extending its reputation as a highly skilled and efficient organisation worldwide.

Hydro Tasmania is a vibrant business with tremendous potential

for growth despite the impact of the current drought. It is our capacity to adapt and change that has been an integral part of our long history and will continue to hold us in good stead to meet future challenges.

Finally, I would like to thank the Board and the staff of Hydro Tasmania for their hard work. The last 12 months have proved once again the importance of having a dedicated, innovative and highly-skilled team to meet the difficult challenges thrown at us and ensure our long-term success as a business.

The auditor's independence declaration is attached to this review.



Tasmanian Audit Office

Auditor's Independence Declaration

11th August 2008

The Board of Directors
Hydro Tasmania
4 Elizabeth Street
Hobart Tas 7000

Dear Board Members

Auditor's Independence Declaration

In relation to my audit of the financial report of Hydro Tasmania for the financial year ended 30 June 2008, I declare that to the best of my knowledge and belief, there have been no contraventions of any auditor independence requirements in relation to the audit nor any contraventions of any applicable code of professional conduct in relation to the audit.

Pursuant to established practice in the private sector, a copy of this declaration must be included in the annual report.

Yours sincerely

H M Blake
AUDITOR-GENERAL



VINCE
HAWKSWORTH



TIME WITH HYDRO
TASMANIA
2 years

POSITION
Chief Executive Officer

“Hydro Tasmania remains well positioned to develop business growth opportunities and expand on its strategic commitment to a sustainable future despite another difficult year of drought and below average rainfall.”

CHIEF EXECUTIVE'S REPORT



“This year brought out the best in Hydro Tasmania’s highly-skilled staff.”

Hydro Tasmania remains well positioned to develop business growth opportunities and expand on its strategic commitment to a sustainable future despite another difficult year of drought and below average rainfall.

While the second straight year of drought had a significant negative impact on our operating cash flow and debt levels, Hydro Tasmania nevertheless performed well to meet community expectations by maintaining security of supply to the State.

This year brought out the best in Hydro Tasmania’s highly-skilled staff as they focused on enhancing our reputation as Australia’s leading renewable energy business by building meaningful relationships with stakeholders and customers.

Hydro Tasmania continued to refine its strategic direction to ensure its long-term success by focusing on the commercial and policy opportunities of the response to climate change at a local, national and global level.

There was significant progress to ensure our strategic direction maintained a commercial focus and reflected our desire to develop closer linkages with end-user

customers. Our response included significant investment in our assets, mitigating the impact of drought by identifying 1000 GWh of new hydro opportunities in the Tasmanian system, investigating the acquisition of a niche interstate retail business, a strategic review of our investment in the Roaring 40s joint venture, investigating the potential for further Remote Area Power Systems (RAPS) developments and building on Hydro Tasmania Consulting’s considerable success nationally and overseas.

Impact of drought

Rain is revenue and the low inflows had a significant impact on the Corporation’s operating results and financial position. The ongoing drought has necessitated prudent management of our water storages, supported by significant imports across Basslink and additional generation from Bell Bay Power Station.

While an increase in the valuation of our assets due to fair value gains delivered a healthy after tax profit, the reality of the impact of low inflows on our ability to generate electricity, while maintaining electricity supplies, resulted in a trading loss of \$58 million.



“The short-to-medium term business focus is to rebuild storages to improve our operational risk profile.”

The low inflows resulted in 35 per cent of Tasmania’s power demand being met by non-hydro sources.

Throughout the year the business continued to focus on cost management with a targeted program delivering recurrent savings of \$22.6 million.

Environmental activities through the year were once again dominated by managing the impact of drought and low lake levels. Significant effort was focused on managing at-risk lakes such as Great Lake, Arthurs Lake and Woods Lake.

The short-to-medium term business focus is to rebuild storages to improve our operational risk profile and to continue the downward pressure on costs. This period will also see us focus on refurbishment of our assets to ensure they are able to continue to provide sustainable and reliable renewable energy for the long term.

Strengthening equity

A positive financial outcome for the year has been the significant increase of \$438 million in net equity reported on our Balance Sheet. A significant contributor to this was the very welcome equity injection received from the Tasmanian Government. This assisted in maintaining our investment in Roaring 40s and in reducing our debt.

The remainder of the increase in equity is mainly attributable to the increase in the fair value of our assets, which results from higher projected electricity market prices, including the emergence of a carbon component within the energy price.

Market pressures

Despite the continuation of the drought across parts of the eastern seaboard of Australia, electricity prices fell during the year as the market’s confidence grew on generators’ ability to maintain supply. Our low storage situation, exacerbated by the continued low

inflows associated with the drought, restricted Hydro Tasmania's ability to export electricity into the Victorian market.

Instead, to maintain security of supply in Tasmania, we continued to import power across Basslink. This was at a significantly higher cost than we could sell to major industrial customers under existing long-term contracts. The impact of this is significant lost revenue to Hydro Tasmania and greater pressure on the future price of power to domestic, commercial and industrial consumers.

Climate change

The climate change debate progressed significantly following the election of a new Federal Government. Hydro Tasmania released its strategic response to climate change in May with the centrepiece being our commitment to becoming the first carbon neutral generator in Australia by 2012. At the same time, the new home for our Consulting business at Cambridge opened, becoming the first Five-Star Green Star office building in the State.

We continue to be part of the *Climate Futures for Tasmania* project while providing significant input into the development of a national policy response and the shaping of the proposed national emissions scheme in particular. This work will continue as we draft our response to the Federal Government's Green Paper on the Carbon Pollution Reduction Scheme released in July.

Our people

One of the biggest challenges facing the energy industry globally is access to and retaining the best people with the right skills.

Our goal is to be the premier employer of the most capable people in our industry. To achieve this we are committed to growing



Values: Award winners from the Generation Outage team, from left, David Price, Stewart Collins, Peter Kapeller, CEO Vince Hawksworth, Glenn Spaulding and Kevin Douglas

our own talent and providing the opportunities for people to develop their capabilities.

Our progress was reinforced by the results of the annual staff survey carried out in May-June. There was a significant increase in engagement levels across the business as well as improvements in most measurements, including job satisfaction, feeling valued, communication and understanding our strategic direction.

The importance of our people to the continued success of Hydro Tasmania cannot be overstated. In the past year they have shown that they have the right mix of skills and knowledge, as well as a willingness to view change as an opportunity.

Our Consulting staff responded strongly to the challenges of working in a competitive market to help the business record another successful year, with all key performance indicators being ahead of budget targets.

Our assets

Our commitment to continuous improvement was particularly evident in the execution of our capital program on time and within budget, including significant projects at Poatina and Lemonthyme power stations. This was accomplished while building more meaningful and mutually advantageous relationships with stakeholders, customers and suppliers, as we seek to become a world-class asset and resource manager.

Stakeholders

During the year, Hydro Tasmania developed closer working relationships with stakeholder organisations to ensure a better exchange of information and a greater understanding of how we each operate. A Memorandum of Understanding was signed with both Hobart Water and the Inland Fisheries Service and an agreement reached with the Tasmanian Aboriginal Land and Sea Council.

There has also been a concerted effort to address long-standing concerns on the west coast about the perceived impact of Hydro Tasmania's cloud seeding



Lake Mackintosh

“Ours is a business planning for the long term – not just the next 10 years but for the next 50-100 years and beyond – to ensure decisions are made to guarantee our ongoing sustainability for future generations.”

program. The release in June of the independent socio-economic study into the program may not have ended community debate but it did herald a new era in what we hope will be more positive and constructive relations with the region. Significant progress on the redevelopment of the Lake Margaret Power Station at Queenstown, culminating in a decision to refurbish the station and reinstate the woodstave pipeline, also helped to reshape this important relationship.

Safety

An ongoing area of concern was our Lost Time Injury Frequency Rate. It is a major disappointment to the business that our end-of-year result of 3.6 was above our target of 2. While there has been a slight improvement on the previous year, there is much work still to be done as we pursue our safety vision of ‘no harm to anyone at any time’. Our safety priorities for the coming year are fatigue, stress, contractor safety management, asset

management, emergency response and driving.

Summary

Last year I reported that significant progress had been made in difficult circumstances and that I believed Hydro Tasmania was well positioned for future success. The past 12 months have only strengthened that view. Despite another year of drought, we have not only focused on addressing the challenges of the present but put considerable effort and resources into planning for future success.

While Hydro Tasmania is acutely aware the year ahead will present similar challenges and is well positioned to manage all eventualities, it is nevertheless also cognisant of the need to look further ahead than just the next 12 months. Ours is a business planning for the long term – not just the next 10 years but for the next 50-100 years and beyond – to ensure decisions are made to guarantee our ongoing sustainability for future generations.

OUR PERFORMANCE





Generation Technician 6 Matthew Breward

OUR PERFORMANCE



Sustainability Code: *We ensure our financial practices promote long-term prosperity and enhancement of the business. We develop new products and services, as well as adapt and change our current ones, to ensure flexibility in the marketplace.*

Economic Performance

Building our financial strength and delivering sustainable returns to our owners, the people of Tasmania, is the mission Hydro Tasmania has set for its financial performance through long-term business value and growth in products and customers.

The drought conditions and maintaining power supply continue to affect Hydro Tasmania's cash flow in the short to medium term. While the long-term business outlook remains positive, these short-term impacts will delay improvements in our financial strength as we rebuild our storages to reduce our operating risk profile.

2007-08 financial results

The increase in Hydro Tasmania's accounting profit in 2007-08 was entirely due to the increased value of net assets as a result of higher energy prices in the market, including the emergence of carbon pricing. However, the operating cash result

was well below expectations as a direct consequence of low inflows and the cost of meeting Tasmanian demand. Profit performance is forecast to improve moderately over the medium term as storages are rebuilt in line with our prudent water management principles which aim for a sustainable long-term supply.

As directed by the Portfolio Minister and the Treasurer, Hydro Tasmania has set its highest priority as maintaining a reliable electricity supply to the State. We have met this objective, despite the heavy financial burden this places on the business.

Maintaining supply by importing electricity over Basslink and operating the gas-fired Bell Bay Power Station contributed to the 2007-08 cash flow from operations of \$24.9 million, which was \$113.4 million below budget. Part of this impact will be offset by our cost reduction targets. The cost reduction program of the past three years met its target in 2007-08, with \$22.6 million in ongoing savings. The final stage of the program has

been included in the 2008-09 budget. In addition savings already made have been embedded into business practice to ensure they remain as ongoing savings.

Our capital program is designed to maintain the safe and compliant operation of our generation assets with a review of the capital allocation process during 2007-08 to reinforce these priorities. We will continue to improve the reliability of our plant to ensure the sustainability of future revenue streams.

Table 1: Financial results at 30 June

Financial years	2008 \$ million	2007 \$ million	2006 \$ million
Profit/(Loss) before fair value	(58.0)	19.5	33.5
Profit before tax	224.2	113.5	39.8
Cash flow ¹	100.5	134.5	221.6
Net debt	878.0	1141.0	1061.0
Weighted average cost of debt	6.54%	6.46%	6.15%
Capital expenditure operations	54.9	54.2	126.4
Investments in R40s	23.0	10.0	3.0
Total Assets	4845.6	4249.0	3851.0

The impact on our cash flow of low inflows, pricing for industrial customers and maintaining supply requires us to carefully balance the competing objectives of providing a return to our shareholder, building storage levels, reducing debt and reinvesting funds into the business to improve long-term value.

The State as shareholder has reviewed the dividend arrangements and expects a progression towards a commercial return over the next five years. A further review will occur in the event of extremely adverse hydrological conditions, such as those under which Hydro Tasmania is currently operating, that would likely result in no dividend being paid. Due to the significant financial impact of the low inflows received during 2007-08, no dividend will be paid during the 2008-09 financial year.

Table 2: Returns to the Government at 30 June

Year ending 30 June	2008 \$000s	2007 \$000s	2006 \$000s
Guarantee fee	5579	5105	4100
Income tax equivalent	0	28 737	19 100
Ordinary dividend	0	21 200	32 000
Special dividend	0	0	8000
Rates equivalent	3900	3240	2900
Total	9479	58 282	66 100

The Community Service Obligation (CSO) is a formal agreement between Hydro Tasmania and the State Government to provide electricity to consumers on the Bass Strait islands at a concession. The net costs are funded by the State Government and in 2007-08 this amounted to \$6.5 million. Renewable energy developments are changing the energy profile of the islands resulting in less reliance on diesel. Going forward,

a new CSO contract² provides for the possibility of a flexible arrangement where the benefits of these developments can provide both savings to the CSO and incentives for Hydro Tasmania to develop a cheaper power supply for the islands.

Long-term business value

The capital structure of Hydro Tasmania improved this year following the injection of equity from our shareholder of \$220 million. This partly offsets the higher proportion of debt attributed to Hydro Tasmania at the disaggregation of the Hydro-Electric Corporation into generation, transmission and distribution and retail businesses in 1998. The equity contribution provides a more sustainable long-term outlook for Hydro Tasmania and strengthens the Balance Sheet to better withstand unfavourable hydrological or market events.

Substantial returns in the long term are expected from a further \$50 million provided by the Government specifically to invest in Roaring 40s within Australia.

Changes in net asset value from year to year are an indication of changes in long-term business value.

Hydro Tasmania's net asset value is currently estimated at \$1.4 billion. Over the year ending 30 June 2008, the net asset value increased by \$438 million. The main drivers of this increase are the \$220 million equity injection and the improvement in price projection which also include conservative carbon pricing assumptions. These have more than offset the impact of the 500 GWh de-rating of the hydro system.

Aligning the business strategy and the Sustainability Code, Hydro Tasmania introduced two measures of business value during the year which in future will be the sustainability measure for long-term

¹ Receipts from customers and grants less payments to suppliers and employees

² The contract was signed after the reporting period on 5 August



KATE GILLIES

TIME WITH HYDRO TASMANIA

3 years

POSITION

Principal Analyst
Strategy and Finance

“Hydro Tasmania’s status as a renewable energy provider puts us in a fantastic position to assist in providing solutions for climate change.

“The renewable energy industry has great prospects and is a good place to be working in the current environment.”

and current value of the business. These measures are net asset value and cost of generation.

The cost of generation (\$/MWh) measure is based on the Corporation’s actual performance for the current financial year. This measure will be affected by inflows, the efficiency of our existing system and changes in our cost structure.

Cost per MWh of Generation = $\frac{\text{accrual payments}}{\text{Generation}}$. This includes all operating expenses and finance costs but excludes tax. An adjustment is also made for Consulting, such that all payments made by the Consulting business are excluded, but a nominal amount for the work done by Consulting for internal customers is allowed for. Generation includes both hydro generation and gas-fired generation.

Cost of generation for the 2007-08 financial year was \$62.36/MWh. This represents an increase of approximately \$10.79/MWh from last financial year. This was the result of low hydro generation volumes and the high cost of maintaining supply for the State. The average cost of generation was significantly higher than the prices received under existing long-term contracts with major industrial customers. This disparity contributed to the operating loss recorded for 2007-08.

It also places upward pressure on the future price of power to domestic, commercial and industrial customers.

Growth and customers

This element in Hydro Tasmania’s sustainability assessment is about responding to market opportunities and developing new products. It addresses our mission of product innovation for customers in consulting services and electricity and green markets. Hydro Tasmania is a wholesale producer of electricity, selling into the National Electricity Market and to wholesale customers (retailers) via derivative contracts. Hydro Tasmania’s retail customers are currently restricted to the Bass Strait islands.

Research and development

Research and development (R&D) contributes to Hydro Tasmania’s growth and our ability to supply customers with innovative products that meet their economic, social and environmental needs.

The R&D program develops new and improves existing products and processes for current and emerging markets, supports technological innovation and applies new technology to enhance system performance.

Hydro Tasmania has revised its approach, formulating a whole-of-business R&D strategy during the year which will be implemented in the coming year. The strategy’s objectives are to:

- › link R&D projects and activities to the business strategy
- › pursue highest priority R&D activities
- › ensure high-priority activities are suitably funded and supported
- › provide for collaboration of R&D across the business
- › ensure learning from R&D is shared across the business
- › provide a place for retention of R&D ideas and opportunities.

Renewable energy projects that are under way include the redevelopment of the Lake Margaret Power Station, investigations for an additional 1000 GWh in the existing hydropower system, the King Island resistor project that reduces diesel use through more efficient use of wind energy, hybrid remote area power supply systems (RAPS) and investigations into innovative operational improvements at the Gordon Power Station that are expected to be applicable in a wider hydropower context.



PAUL SMITH

TIME WITH HYDRO TASMANIA

2 years

POSITION

Graduate Project Manager
Hydro Tasmania
Consulting

“This business has many sides which a Project Manager can get involved with and this prospect is exciting.

“I’ve just started work on a modernisation project and I’d like to eventually develop my skills to a senior level. This business has all the potential for me to satisfy my ambitions in project management.”

Consulting products and services

Hydro Tasmania Consulting developed an account management system in 2007-08 to improve its service by working more closely with clients to understand service requirements and to better manage project programs and delivery. Account Managers were appointed to key accounts locally, nationally and internationally.

Our focus is on providing clients with sustainable solutions that combine technical excellence and commercial outcomes. A process for measurement of customer satisfaction has been established to ensure the business remains responsive to client needs. The ongoing surveys are assessed to identify areas to improve performance in meeting client needs and expectations.

Throughout 2007-08, the India and Melbourne offices continued to grow in order to service the expanding Australian and wider Asia-Pacific markets.

Over the last year we spent more time evaluating products and better understanding our existing markets. A number of initiatives are under way

to improve product development and international marketing.

Marketing is undertaken from a central team to ensure the Hydro Tasmania Consulting marketing strategy and brand are consistently applied across all operating regions and offices.

The team is managed by a Certified Practising Marketer (CPM) who, to retain certification, must adhere to the code of practice of the Australian Marketing Institute. There have been no non-compliances with the code. Hydro Tasmania Consulting’s client base is expanding due to the increased focus on sales and client service and by offering products that are responsive to changing market trends such as climate change and water management. In 2007-08, Hydro Tasmania Consulting revenue was eight per cent above budget.

The market for Hydro Tasmania Consulting’s end-to-end data acquisition solution, Ajenti, is rapidly expanding beyond Tasmania.

Energy products

The new Federal Government’s policies relating to renewable energy targets and carbon emissions have provided opportunities to extend

existing product development and signalled a range of future products to be developed, especially relating to carbon emissions trading.

Hydro Tasmania will focus on the renewable energy market for new energy products such as electricity derivatives to manage electricity market price volatility and environmental products for renewable energy targets and carbon emissions trading.

Product demand is assessed by traders who, through regular discussions with counterparties, listen to customer needs and develop and provide products in response to market demands.

Energy product trading is subject to stringent internal management controls and obligations under financial market, trade practices and electricity market legislation and regulation. Traders must take part in an extensive training program to understand and comply with all the internal and external obligations and to report any breaches.

No fines or required actions were recorded for the year; a breach of the Australian Financial Services Licence regulations was reported.

Sustainability self-assessment in brief

2005-06 Score	2006-07 Score	2007-08 Target	2007-08 Score	2008-09 Target
3.5	3.6	3.5	3.7	4

For more information on scoring details and contributions, see Table 23.

	Equity injection improves Balance Sheet
	The short-medium term impact of low inflows will delay improvements in our long-term business value
	Carbon pricing has increased net asset value
	Consistent with 2007 Corporate Plan, no dividend was paid in the 2007-08 financial year
	Consulting implemented an account management system and appointed Account Managers, focusing on understanding customer needs
	Research and development (R&D) strategy developed which is aligned to business priorities and involves collaboration across the business
	R&D projects continued to develop and implement new and emerging technologies including King Island resistor and remote area power systems (RAPS)
	Participating in State and Federal policy development for greenhouse emission abatement
	Consulting introduces measurement of client satisfaction

Performance against 2007-08 commitments

Commitment	Progress
Achieve additional targeted savings of \$5 million in 2007-08	 This target was met with savings embedded into future budgets
Lift business trading revenue by selling energy for a higher value in the marketplace	 Market expectations are moving up with prospects of carbon trading
Establish an asset valuation methodology more representative of the Corporation's enterprise value	 Several assets now carried at fair value
Actively investigate new Consulting products and markets to expand the business and client base where feasible	 Research and developing an ongoing framework are currently under way
Develop comprehensive innovation, research and development programs for new and existing Consulting services	 Program developed and coordinated into whole-of-business strategy
Implement Consulting client satisfaction survey recommendations to improve service delivery	 Actions are being implemented as part of the business improvement process. A major focus for 2008-09 will be the development of a client care charter
Formulate whole-of-business research and development strategy	 Complete and embedded in management system

Commitment for economic performance in 2008-09

- › Return Lake Margaret Power Station to service
- › The 1000 GWh project - establish 65 GWh of new projects and have 100 GWh of projects in the pipeline
- › Commission solar/resistor projects on King Island
- › Develop strategies to reduce diesel use on Flinders Island
- › Develop an approach and guide for intellectual property management
- › Integrate sustainability KPIs into operational planning



LIAPOOTAH POWER STATION

“Hydro Tasmania
invested \$37.4 million
in capital works
for assets during
2007-08.”

Assets and Resource Use

Hydro Tasmania ensures sustainable hydropower production by careful engineering management of its portfolio of generation assets through maintaining, refurbishing and upgrading as required to balance production opportunities with risk management whilst ensuring public safety.

Asset management

A comprehensive risk management program monitors the condition and performance of our assets and prioritises maintenance, refurbishment and upgrade projects to implement the program.

In 2007-08, Hydro Tasmania made significant improvements to lift asset management further towards a sustainable proactive approach and world-class practice. We developed a system to monitor condition and performance and assess risk for the entire generation portfolio. This in turn improved and clarified maintenance and operational requirements and more clearly defined the five-year capital works

program. Importantly, the process also improves the alignment of asset management with NEM trading requirements. Identified ‘champions’ are responsible for implementing the plan in 2008-09 and coordinating works to achieve a balance between plant outage, energy supply and trading outcomes.

Hydro Tasmania invested \$37.4 million in capital works for assets during 2007-08, with major work on Poatina Power Station and the Lemonthyme Power Station and its water conduit.

Two significant unplanned outages resulted from plant failures at Poatina and Bell Bay power stations. Our people responded rapidly to resolve the problems and showed an outstanding level of ingenuity, collaboration with our suppliers and teamwork across the business. The reviews of each event led to improvements in systems and processes.

The age of Bell Bay Power Station provides a challenge to managing the condition of the plant which is maintained under contract by Transfield Worley Parsons.

Sustainability Code: *We use resources efficiently and maintain our energy system, including assets, for the long term. We ensure new developments meet sustainable development requirements.*



MATTHEW HODGETTS



TIME WITH HYDRO TASMANIA

16 years

POSITION

Outage Manager
Generation

“I’m part of a small but dedicated team that is assisting Hydro Tasmania in its quest to be a world-class manager of its assets.

“The challenge of the role is what I enjoy the most as every outage is different with its own unique challenges.

“I am privileged to work with great people from all different positions and backgrounds throughout the business.”

Asset and public safety

An integral part of world-class asset management is ensuring safety for employees and the public. Improvements in 2007-08 centred on primary protection assets, compliance and contractor safety.

A comprehensive testing program was developed and implemented to significantly improve the management of the primary protection assets, the category of assets that contributes most significantly to plant and personnel safety. The program ensures they are fit-for-purpose and that any deficiencies in performance are identified and addressed.

Regulatory and operational compliance is a key asset management activity. With a need for increasingly more comprehensive and proactive compliance, we developed an improved program for the management of regulatory and operational compliance associated with the assets and generating operations which will be implemented in 2008-09.

This improvement was acknowledged by a recent internal audit, conducted with external expert assistance, which noted improvements in controls over asset

management systems were evident since the last audit in 2005, and that a good culture appears to be developing around safety, permits to work and legislative compliance obligations.

Safety for contractors on Hydro Tasmania sites has been under review and a thoroughly revised and updated process for Contractor Safety Management was developed during the year and introduced in July 2008.

Members of the public are potentially at risk if they accidentally or deliberately venture onto Hydro Tasmania sites. Signage and site security are intended to prevent unauthorised access by the public.

Hydro Tasmania manages large tracts of land and non-generating assets statewide used for operations, recreation and tourism. Hydro Tasmania has measures in place to manage the risk associated with public safety, the failure of which has social, environmental and financial consequences for the business. In collaboration with peak recreational bodies and government agencies, Hydro Tasmania continues to review and improve safe recreational practices. **P44.**

Dam safety

Hydro Tasmania owns the largest number of dams in Australia and the dam safety program ensures the Tasmanian community is not exposed to unacceptable risks associated with these assets by applying industry best practice and complying with dam safety obligations.

The management of Hydro Tasmania’s dam portfolio is based on a rigorous process of performance assessment against the Australian National Committee on Large Dams (ANCOLD) criteria for public safety. The program consists of surveillance, risk assessment, mitigation and capital upgrade prioritisation. The dam safety program is subject to biannual independent external expert review.

Major dam safety works for 2007-08 included a significant upgrade at Dee Dam, bringing the 1950s structure up to modern design standards, an upgrade to the drainage and monitoring system of Trevallyn Dam and the design for the forthcoming major works at Catagunya Dam.

No public safety or significant environmental incidents associated with Hydro Tasmania dams were reported during 2007-08.



NAOMI WATTS

TIME WITH HYDRO TASMANIA

2 years

POSITION

Acting Risk Analyst
Energy Trading
Strategy and Finance

“I am part of a team that is responsible for ensuring Hydro Tasmania’s revenue streams are protected and enhanced.

“Due to the nature of my role, there are always new challenges associated with market developments and changes. The fact that I am regularly challenged in my role motivates me and keeps the job interesting.

“The people I work with are also bright and enthusiastic which helps make work enjoyable.”

In the event of an incident which could potentially threaten a dam, Hydro Tasmania has a functional emergency response plan in place, the Dam Safety Emergency Plan (DSEP).

In August 2007, the largest floods on record since the construction of the affected power schemes occurred in the Pieman, Forth and Derwent rivers. The floods provided an opportunity to test the robustness of the internal arrangements for the DSEP, particularly communications, resource management and asset monitoring. External stakeholder communication was also tested in the response. The plan worked without incident.

A periodic review of the DSEP is under way and will be followed by an organisation-wide retraining program.

Resource use

Managing water

Drought continued to put Hydro Tasmania’s water storages at risk during 2007-08 with the driest period for 75 years between October and May putting the system at high risk. The low inflow equated

to approximately 65 per cent of the generation requirements to meet the Tasmanian electricity demand, and followed a similar situation in the previous year. In January 2008 there was a net loss of water through evaporation.

The other extreme for water management is flooding. The August 2007 floods in several catchments provided the challenge to capture the value from the excess water while it was available.

As directed by the Portfolio Minister and the Treasurer during the year, Hydro Tasmania’s highest priority is maintaining a reliable electricity supply to Tasmania. This requires Hydro Tasmania to plan the management of its storages prudently and to minimise the risks of a shortfall in generation capacity and resultant risk to system security. This planning considers a range of factors that influence energy production and examines scenarios for unplanned outages of generation plant and Basslink.

Hydro Tasmania is in close consultation with the Tasmanian Government on water and energy supply issues, especially under the

current conditions of low storages. An internal management group, chaired by the CEO, was formed in response to low inflows and is monitoring and coordinating business activities relating to the low storage situation.

Hydro Tasmania has managed the period of low inflows through a strategy which includes:

- › increased use of Bell Bay thermal units
- › heavy reliance on Basslink import capability
- › continued careful management of hydro storages to maintain availability of hydro generation capacity.

The impact of the two-year drought on Hydro Tasmania’s hydro storages and the consequent ability to generate power is shown in Table 3.

Table 3: Energy in storage (GWh)

	01/07/2008	01/07/2007	01/07/2006
GWh in storage	2758	2786	4392
Per cent full of total energy in storage	19.1	19.3	30.5

In 2007-08, Bell Bay thermal units produced 1169 GWh of electricity, and Basslink net imports to Tasmania amounted to 2264 GWh.

While lake levels remain low, using the Basslink import capability remains an integral part of our water management strategy. Hydro Tasmania will run Bell Bay Power Station by agreement with the owner until the Tamar Valley Power Station is completed, due in 2009. The Bell Bay Power Station is then planned to be decommissioned.

The overall reliability and sustainability of the hydrological system depends on the balance of inflow into storages and hydropower production.

Reliability of power supply during low inflow periods depends on the ability to import using the Basslink facility and on generation from the Bell Bay Power Station.

The reliability and efficiency of the hydropower output are managed together - short-term efficiency measures maximise the use of the water resource for reliable

long-term energy production. Reliability of power supply during low inflow periods depends on the ability to import using the Basslink facilities and on generation from Bell Bay Power Station.

Analysis of changes to rainfall patterns over a statistically relevant period resulted in reducing the expectation of the amount of future inflows to be equivalent to 9000 GWh per annum. For a sustainable system, generation will need to be broadly in balance with inflows, however as storages recover there will be opportunities to draw upon them during periods when there is a high market value for additional generation production.

The 1000 GWh project will identify further development within the existing hydropower system to maintain system capability.

Hydro Tasmania provides access to water for agriculture and consultation with irrigators is an ongoing activity. The Tasmanian Government's Irrigation Development Board was set

up to develop and deliver irrigation projects in Tasmania. Hydro Tasmania is a stakeholder to this Board and has a range of involvement including water supply, availability and pricing, a submission for funds for the Ouse-Shannon-Clyde scheme and providing consulting services.

Waste

During 2007-08, Hydro Tasmania introduced consolidated data collection for waste in Tasmania, excluding King Island. This data now provides us with a benchmark to develop a waste management strategy.

General waste for the year decreased to 554 cubic metres from 1268 cubic metres in the previous year.

Moving Hydro Tasmania Consulting staff from four sites to the new Five-Star Green Star office facility at Cambridge generated a large amount of waste and recycling from the vacated office, including 32 cubic metres of electronic equipment waste and 65 kilograms of compact disc waste. Hydro Tasmania Consulting is to appoint a part-time Sustainability Officer to manage office waste and recycling to ensure we meet the standards required for waste management by the star rating.



CHRISTOPHER GWYNNE



TIME WITH HYDRO TASMANIA

6 years

POSITION

Program Manager (OPEX) Generation

“I really enjoy the trust placed in me to make decisions and move the business forward in some key business areas.






“Without question Hydro Tasmania is a leader in the field of renewable energy, not only in the sense of our physical assets but also our people assets.

“As long as the business continues to provide diverse and challenging opportunities I will be keen to keep playing my part in the bigger game plan.”

Sustainability self-assessment in brief

2005-06 Score	2006-07 Score	2007-08 Target	2007-08 Score	2008-09 Target
3.6	3.5	3.5	3.8	4

For more information on scoring details and contributions, see Table 23.

	No public safety or significant incidents associated with Hydro Tasmania dams were reported
	1000 GWh project to maintain system capability of hydropower in the long term
	Biannual assessment of dam safety by ANCOLD
	In the current low inflow conditions Hydro Tasmania has managed the water through a strategy to balance inflow and production, using thermal generation and Basslink facility for importing
	Significant decreases in general waste disposal

Performance against 2007-08 commitments

Commitment	Progress
Continue to implement the asset sustainability refurbishment program	 Major improvement to process - an ongoing business activity
Continue to update the outage program to maximise sustainable value in the market	 Major improvement to process - an ongoing business activity
Work closely with NEMMCO, Transend and other network service providers to reduce the impact of constraints on our operations and revenue	 This was addressed in 2007-08 and is an ongoing business activity
Undertake a comprehensive waste audit at Hobart Office and implement strategies to both minimise consumption and waste levels in the building	 Audit complete. Strategies not yet developed to minimise consumption and waste
Consolidate data and ensure full coverage of waste and emissions from across the business, addressing any gaps	 Complete consolidation of data and gaps addressed. Emissions are now included in greenhouse gas reporting
Implement more rigorous procedures for SF6 to track inventory and minimise losses	 Complete – procedures in place for tracking and minimising losses which will be an ongoing business activity
Implement project to assess PCB quantities in electrical cables and develop best-practice process to dispose/recycle waste, commencing at Poatina	 Project complete at Poatina and process to dispose/recycle waste embedded as an ongoing business activity

Commitment for 2008-09

- › Review and implement appropriate recommendations from 2007-08 asset management audit
- › Commence the site works for the major restoration of the Catagunya Dam
- › Based on reviewing annual average inflows to hydro storages, rebuild storages to be over 30 per cent of full energy by 30 June 2013
- › Develop waste management strategy

“Hydro Tasmania believes good governance is a major contributor to creating a sustainable organisation and one which is easy to do business with.”

Governance

Hydro Tasmania believes good governance is a major contributor to creating a sustainable organisation and one which is easy to do business with. Ethical practice, regulatory compliance, Board reviews, policies, business strategies and being transparent convey the ethics of a business to its stakeholders. Hydro Tasmania focuses on good governance practice, compliance and risk management.

Hydro Tasmania is subject to the *Hydro-Electric Corporation Act 1995* and the *Government Business Enterprises Act 1995* (GBE Act) for its governance structure and conditions. The Board refers to the ASX corporate governance guidelines for its corporate governance direction and maintaining sound practices. The Board assesses itself annually for continuous improvement of its processes and this year engaged an independent consultant to review its structure and performance. A number of recommendations were received and are being implemented. A further review of the Board's committee structure will be undertaken.

The business structure is reviewed on an ongoing basis to ensure it is appropriate for the purpose of achieving the business goals. The management structure was embedded at the beginning of the restructure last year. This year, the management team has refined the alignment of operational planning with the business strategy, which will be an ongoing process.

Hydro Tasmania took another step forward in its journey of embedding sustainability into business practice with a review of the key performance indicators (KPIs). The result was six priority KPIs to reflect the sustainability principles which will monitor and measure the sustainability of the business on a

continuous basis in 2008-09.

During 2007-08, a Code of Ethics was developed and approved by the Board after the reporting period, in July 2008. The Code of Ethics is published on Hydro Tasmania's website.

Our policy framework was subject to a major overhaul during the past year. The number of policies was reduced from 95 to 11, providing a framework of policies relating to major activities with subsets of standards, guidelines and procedures. This will focus decision-making in areas concerning operational activities relating to financial matters, asset management, procurement, energy trading, human resources, health and safety, environment, information management and assurance. The implementation of this review is in process and expected to be completed during the 2008-09 period. Policies and codes that may impact or influence stakeholders, such as those covering bribery and corruption, procurement, environment and ethics, are published on the website.

Certified management systems include the Environment and Sustainability Management System (ESMS) and the Consulting Quality System. Hydro Tasmania's most important management systems are the occupational health and safety system HydroSafe, ESMS and Dam Safety, which cover staff health and wellbeing, environment and public safety management.

Risk management

The Integrated Business Risk Management (IBRM) system provides the business with a comprehensive and robust risk management framework.

In 2007-08 we replaced the paper-based system with the Cura risk management software system, configured with IBRM methodology and providing a single risk repository

Sustainability Code: *We govern the business with processes that ensure integration and implementation of sustainability requirements. We make ethical decisions through the application of our Values and Code of Ethics within a public reporting framework. We comply with all relevant legislative requirements and other commitments.*

across the organisation. It facilitates assessment and analysis of risks, determination and allocation of mitigations, and enhanced monitoring and reporting facilities.

An external Good Practice Risk Assessment carried out by KPMG based on its Enterprise Risk Management Framework found Hydro Tasmania's risk management system and practices to be mature. The review also made a number of recommendations for improvement, some of which are already in progress and others are to be implemented over the next two years.

Compliance

Hydro Tasmania maintains a breach register with monthly breach reporting to the Executive Leadership Team and the Board for all compliance matters. Immediate reporting is required for specific key obligations under individual policies and processes.

Staff with compliance responsibilities undertake training on a regular basis for key obligations, including environment, market trading, trade practices, dam safety and occupational health and safety.

The Auditor-General has undertaken an investigation into Hydro Tasmania's processes for approving currency and interest rate hedges. Hydro Tasmania has cooperated with the investigation, the results of which will become public when the Auditor-General's report is released.

Breaches

The breach register recorded 71 breaches of internal and external obligations. Breaches were in the categories of Environment, Workplace Standards, National Electricity Rules, AFS Licence, *GBE Act* and other legislation.

The most significant breaches were the late payment of the Government Guarantee Fee, which attracted additional interest of \$27 890 and

environmental breaches, including the incorrect disposal of waste, failing to collect test samples and oil spills. No environmental penalties were imposed.

All matters have been or are being addressed by remedial actions or as part of a planned or continuing work program in consultation with the appropriate authorities.






During the year, Hydro Tasmania also reported a number of incidents in the operation of Gordon Power Station as non-conformances with requirements for changing water discharge rates in Hydro Tasmania's water licence conditions. A subsequent internal review identified

that nearly all the events related to system or market events were outside Hydro Tasmania's control, or were minor deviations consistent with NEMMCO operational tolerances. Investigation of the incidents did, however, identify inadequacies in Hydro Tasmania's compliance system for its water licence, including reliance on retrospective assessments and a lack of connection between licence conditions and trading activities. These inadequacies are being addressed. Discussions are also being held with the Tasmanian Electricity Regulator to clarify ambiguities and complications in the existing rule.


Sustainability self-assessment in brief

2005-06 Score	2006-07 Score	2007-08 Target	2007-08 Score	2008-09 Target
3.5	3.4	3.5	3.5	3.7

For more information on scoring details and contributions, see Table 23.

	Introduced Code of Ethics
	Sustainability Policy reviewed – introduced Sustainability Code
	No material change in level or nature of compliance breaches
	Policy framework reviewed to improve efficiency of decision making – reduced number of policies from 95 to 11
	Independent review of Board's structure and performance
	New business structure settled and management team has refined process to align operational plans to business strategy
	Continued to maintain Compliance Policy and process

Performance against 2007-08 commitments

Commitment	Progress
Develop a code of ethics and provide training to staff	 Code developed with training expected to be completed by December 2008

Commitment for 2008-09

- › Conduct a review of the Board Committee framework

OUR PEOPLE





Apprentice Mechanical Fitter Charles Monteith Jr

OUR PEOPLE



Sustainability Code: *We offer opportunities for employees to grow and develop, ensuring the capability of our people and encouraging innovation, learning and research. We ensure a diverse and equitable workforce, and support and respect the protection of internationally proclaimed human rights. We are committed to a safe and healthy workplace.*

Employees

Hydro Tasmania aims to be the premier employer of the most capable people. To achieve this we will concentrate on preparing strategies for developing our people to their potential and improving our retention rates.

2007-08 presented many challenges to our people who performed well under difficult operating conditions as well as coping with the restructure of the business. They are to be congratulated for their continued contribution, enthusiasm and commitment to the business.

The restructure of the business was completed in 2007-08 with the majority of employees placed in the new structure during the year. Management supported employees throughout the changes, ensuring that the reasons for change were effectively communicated well ahead of changes and that those affected were treated consistently and compassionately. Appointing internal candidates was preferred to finding

external applicants for new positions and those displaced from positions no longer required were given a choice of alternative employment opportunities within Hydro Tasmania wherever possible. Those not placed in the new business structure included 62 redundancies and a small number waiting for a position in another area of the organisation where the changes were not fully implemented. Those affected by the change were encouraged to use the support provided by the Employment Assistance Program (EAP).

In the 2008 Employee Feedback Survey conducted in May-June, our employees indicated that they are more engaged than the employees of 87 per cent of Australian organisations included in our survey provider's benchmark database. This is a vast improvement on the 2007 benchmark result of 59 per cent. This year's results are likely to be influenced by several factors, including structural changes, management development and a general focus on improving



FIONA DIXON

TIME WITH HYDRO TASMANIA

8 years

POSITION

Manager Financial Accounting

Strategy and Finance

“I am responsible for Hydro Tasmania’s external financial reporting, meeting our tax obligations and ensuring our suppliers are paid on time.”

“Hydro Tasmania is working under trying circumstances to seek better and more efficient ways to generate electricity from renewable resources.”

“I expect the principles underlying our business operations will be deservedly recognised with the implementation of a national emissions trading scheme.”

“The focus is on retaining and developing our skilled people as a crucial element in the sustainability of our business.”

top-down communication for a better understanding of such topics as strategy, values and sustainability.

Table 4: 2007-08 Hydro Tasmania employee turnover by age

Age	Count	%
24 and Under	9	1.1
25-34	20	2.4
35-44	40	4.9
45-54	31	3.8
55+	29	3.5
Total	129	15.8

Table 5: 2007-08 Hydro Tasmania employee turnover by gender

Gender	Count	%
Female	25	3.1
Male	104	12.7
Total	129	15.8

Table 6: 2007-08 Hydro Tasmania employee turnover by region

State	Count	%
SA	1	0.1
TAS	120	14.8
VIC	7	0.8
WA	1	0.1
Overseas	0	0.0
Total	129	15.8

Attraction, capability and retention

Skills retention and attraction

The global engineering and technical skills shortage is a challenge for Hydro Tasmania.

The new organisational structure has improved the alignment of skills with our business strategy, and now the focus is on retaining and developing our skilled people as a crucial element in the sustainability of our business.

Hydro Tasmania will develop a talent management strategy that will integrate attraction, development and retention of people with key skills. It will extend and integrate our existing people strategies and initiatives and will be implemented in 2008-09.

Development is an important retention strategy for Hydro Tasmania. During 2007-08 we reviewed and revised the leadership and graduate development programs and started developing a leadership initiative to build capability for leading change.

The Performance Development Review process continues to identify and address the individual and



Cambridge art: Tasmanian Minister for the Environment, Parks, Heritage and the Arts Michelle O'Byrne, right, at the unveiling of the art installation at Consulting's new home. She is pictured with, from left, CEO Vince Hawksworth and artists Stephen Hurrel and John Vella

team development needs of our employees. The 2008 employee survey indicates that our people rated Hydro Tasmania 4.56 out of a possible 7 for career development opportunities, a slight increase from 2007. Despite this increase, career development opportunities continue to be an area we are working to improve within the organisation.

Hydro Tasmania introduced GenTech, a program for field resource training and development, which provides a career path for technicians. GenTech is based on the nationally accredited training package for electrical technicians and adapted to suit the specific needs and capabilities of our people in the field and is integrated with workforce planning activities. The program links salary and career progression with attaining qualifications that align to Hydro Tasmania's generation activities. During April, 300 Hydro Tasmania Consulting employees were successfully relocated to the new

purpose-built accommodation at Cambridge. The new office is Tasmania's first Five-Star Green Star office design premises. An employee working group was actively engaged in preparing for the move, ensuring the new office would be a great place to work. Their initiatives included establishing a gym, selecting local artwork for display around the building, naming meeting rooms after inspiring people and places, establishing a social club and holding 'welcome' barbecues. The working group continues to develop ideas to enhance the working environment.

Employee engagement for Consulting employees increased this year from 26 per cent to 46 per cent, a significant increase which brings Consulting engagement in line with the rest of the business. This result suggests that the move to Cambridge has not adversely affected the engagement of our Consulting people.

Hydro Tasmania supports flexible working arrangements for work-life balance with flex-time and home-based work arrangements which are included in policies and enterprise agreements. In the 2008 survey, 77.8 per cent of our people rated management support for flexible work arrangements favourably, a slight improvement on a result of 76.9 per cent in 2007.

All employees, including part-time or temporary fixed-term employees, are entitled to the same benefits as full-time employees.

Table 7: Employee composition by type at 30 June 2008

Attendance type	Count	%
Casual	30	3.6
Full-time	732	89.4
Part-time	57	7.0
Total	819	100.00



Acting Team Leader Performance Testing Gabriel Ojeah

“We believe conditions of service at Hydro Tasmania are fair and equitable relative to other businesses and industries nationally.”

Table 8: Employee exits and reasons for 2007-08

Termination Reason	Count	%
Compulsory Redundancy	62	48.1
Deceased	1	0.8
Resignation	54	41.9
Retirement	1	0.8
Term Expired	10	7.8
Voluntary Redundancy	1	0.8
Grand Total	129	100.0

Table 9: Employee voluntary exits in 2007-08 within 12 months of starting work

Reason	Count	%
Resignation	11	1.3

Social and gender balance

CEO Vince Hawksworth commissioned a report on gender diversity within the organisation to see what more Hydro Tasmania could do about the gender imbalance in our workforce. The report acknowledged Hydro Tasmania’s initiatives in place to support gender diversity, and that Hydro Tasmania, as primarily an engineering organisation, is operating in a male-dominated industry. The report made a number of recommendations for improvement in relation to gender diversity around attraction, retention and measurement, in particular regarding formal awareness of gender diversity, career development, networking opportunities, and work flexibility. Recommendations will be incorporated into our people strategies and initiatives in 2008-09.

<p>TIME WITH HYDRO TASMANIA 24 years</p> <p>POSITION Senior Advisor People and Performance Business Performance</p>	<p>YVONNE NOSWORTHY</p> 	
<p>“I provide advice and assistance to staff to ensure that what we do is fair and equitable and finds the right balance between employee and business needs.</p> <p>“I am often inspired by the depth of talent we have and feel privileged working in that environment.”</p>		

Table 10: Employee gender composition in categories at 30 June 2008

Employment level	Female %	Male %	Number of Employees
Board	29	71	7
Executive	16	84	63
Snr Officer Band	14	86	111
Award Level	25	75	639
Total	23	77	819

We believe conditions of service at Hydro Tasmania are fair and equitable relative to other businesses and industries nationally, because we know conditions meet or exceed the Australian Fair Pay and Conditions Standard. Conditions are negotiated through our two Enterprise Partnership Agreements (EPAs), which involve representatives from unions, employees and management. Union membership is open to all employees.

The proposed 2008-2011 Hydro Tasmania Consulting EPA offer was not supported by employees at a ballot in August 2008. Consultation regarding ongoing arrangements continues with Consulting employees.

The 2009-2012 Hydro Tasmania Energy/OCEO EPA negotiations will begin in the next reporting period.

Hydro Tasmania completed several building upgrades to meet obligations under the *Disability Discrimination Act*. The upgrades provide braille buttons and voice activation call responses in lifts and hearing loops in two main meeting rooms.

Equal employment opportunity (EEO) is embedded in Hydro Tasmania’s work practices and supported by mandatory biennial training of all employees. Training is conducted online and includes employee and manager modules. No incidents of discrimination were recorded this year.

Safety, health and wellbeing

Safety

The Executive Safety Team (EST), which includes all General Managers and the CEO, assessed its own safety performance during the year and found members could improve safety leadership. The team developed new terms of reference, reflected on leadership behaviour and published a statement

of commitment to safety. The EST is acting on its commitments and has spent more time out in the field listening to and learning from employees about safety management.

Local Safety Teams at worksites across the business represent the health and safety interests of employees in the workplace, encourage safe practices and make recommendations to EST for improvements, and with the EST make up 14.9 per cent of the total workforce.

A risk management review of safety issues highlighted areas for improvement in our safety management approach. The Safety Improvement Plan was developed to address as priorities the issues surrounding fatigue, stress, contractor safety management, asset management, emergency response and driving. Initiatives have been introduced which include defining a fitness-for-work framework, renewed procedures, new emergency equipment, training programs, audits and improved communications.

The employee survey shows that safety is considered among the strengths of Hydro Tasmania’s working conditions.

TIME WITH HYDRO TASMANIA

25 years

POSITION

Production Manager

South

Generation

MARK HILLS

“My job is to manage our assets safely, efficiently and cost effectively and look for opportunities to maximise profits through production opportunities.”

“Hydro Tasmania is set to be a key player in the electricity market delivering a clean green product but at the same time creating a sustainable future.”

Safety performance

Any safety incident is significant to Hydro Tasmania as we pursue our vision for safety - ‘no harm to anyone at any time’.

Our Lost Time Injury Frequency Rate target of 2 remains elusive and it is a major disappointment to the business that the result for the year was 3.6, above our target of 2, although it is a slight improvement on the previous year.

The severity rate of lost-time injuries has increased significantly, mainly due to one office incident where an employee sustained injuries from a fall down stairs that required lengthy recuperation time.

Carrying gloves on all generation sites became mandatory as a result of 32 hand and finger injuries – the aim is to reduce this disturbing figure.

Table 11: Hydro Tasmania OH&S Statistics

Performance Indicator	2007-08 Target	2007-08 Result	2006-07 Result	2005-06 Result	2004-05 Result
Fatalities (number)	0	0	0	0	0
Lost Time Injury Frequency Rate	2	3.6	4.1	1.3	3.2
Medical Treatment Injury Frequency Rate	Reduce compared to 2006-07	8.9	8.4	4.6	13.6
Severity (days lost) Frequency Rate	Reduce compared to 2006-07	38.1	17.6	29.5	35.0
All Injury Frequency Rate	Reduce compared to 2006-07	49.8	49.1	34.7	38.9
Hazard reporting (No./employee)	1	0.49			
Absenteeism (No./employees minus casuals)	N/A	3.91	3.95	3.97	-

Contractors

Contractor safety management is being embedded further through the Safety Improvement Plan. A revised Contractor Safety Management Procedure was introduced during the year. Hydro Tasmania does not include contractors in the lost-time injury frequency rate as it has no system to determine total number of hours worked by contractors.

The number of lost-time injuries for contractors is shown in Table 12.

Table 12: Number of contractor lost time injuries at 30 June

	2008	2007	2006
Lost Time Injury	1	0	1

Health and wellbeing

Absenteeism is considered an indicator of the health and wellbeing of employees. Absenteeism includes an employee absent from work because of incapacity or disease, whether or not it is work-related, except for leave involving workers compensation which is reported as part of the Severity Rate.

Permitted leave, such as holidays, study, maternity/paternity and compassionate leave, is excluded. The target for 2008-09 is 3.5 days.

This year Hydro Tasmania finished its review and alignment of the health and wellbeing programs, such as rehabilitation, family support, EAP, workplace support officers, EEO training and safety, to create a more holistic program – a commitment made in 2005-06.


Healthy Hydro was redesigned as a broad health and wellbeing program to ensure equitable service to all employees as part of the overall business strategy of fitness for work. Organisation-wide access to health assessments, individual and team programs and health issue forums is expected to lift the participation rate to over 40 per cent. This would be a significant improvement on participation in the former program by a number of regular participants who represented only a small percentage of the workforce.


Hydro Tasmania introduced an Alcohol and Other Drugs Policy and Procedure in 2006-07 and this year focused on further embedding procedures. Initiatives included the introduction of blood alcohol content (BAC) self-testers to encourage voluntary self-testing, and completion of an alcohol and other drugs education program for all employees. A review of the procedure will be completed in 2008-09.


Sustainability self-assessment in brief


2005-06 Score	2006-07 Score	2007-08 Target	2007-08 Score	2008-09 Target
3.4	3.3	3.5	3.3	3.7


For more information on scoring details and contributions, see Table 23.


-  As result of restructure, workforce size retained; skills more aligned to business strategy


-  External gender diversity review acknowledges a gender imbalance in the electricity industry sector and provides recommendations to Hydro Tasmania for improvements


-  Increased employee satisfaction and engagement score to 87% - up from 59%

-  Employee turnover increased - 15.8% was above the KPI of 10% - attributable to the organisational restructure



-  Graduate and leadership programs revised

-  Maintained levels of safety

-  Initiated the Safety Improvement Plan based on 6 safety priorities

-  Revised Healthy Hydro Program to target greater participation across the business

Performance against 2007-08 commitments

Commitment	Progress
Re-evaluate Hydro Tasmania safety risks and prioritise initiatives to achieve our vision of “no harm to anyone at any time”	Completed - the Safety Improvement Plan was introduced with six priorities 
2005-06 commitment: Create a holistic health and wellbeing program by integrating the Healthy Hydro Tasmania and Employee Assistance programs and the Equal Opportunity system to increase efficiency and effectiveness	Programs are aligned for holistic approach to health and wellbeing - completed with continuous improvement cycle embedded 

Commitment for 2008-09

- › Implement the leadership development initiative
- › Develop a business-wide talent management strategy
- › Implement recommendations from 2006-2007 Energy/OCEO EPA remuneration model review
- › Implement recommendations from gender diversity review
- › Address further actions relating to the top six safety priorities



Partnership: In 2007 Hydro Tasmania Consulting signed an MOU with the University of Tasmania. Pictured are General Manager Consulting Mike Brewster, left, and Tony Baker, CEO UTAS Innovation

“A model is being developed for collaborative relationship-based engagement which includes greater collaboration across the business and training in skills and behaviour.”

Sustainability Code: *We endeavour to gain respect and trust through active engagement with the community and stakeholders. We are committed to sharing information, building community capability and providing for multiple use of our land and water assets. We encourage our suppliers, customers, partners and industry peers to be sustainable.*

External Stakeholders

Hydro Tasmania continues to develop its stakeholder relationships. The new business structure has improved stakeholder focus with a dedicated team coordinating the Corporation's approach to stakeholder engagement which is vital to advance our operational strategies. A model is being developed for collaborative relationship-based engagement which includes greater collaboration across the business and training in skills and behaviour. The team was brought together to include people with expertise and responsibilities to stakeholder interests in the environment, recreation, government relations, energy industry policy and the media. Listening to stakeholder interests and concerns and collaboratively working through

solutions is the main focus of the team. Members of the team meet with stakeholders regularly, both those who have direct dealing with Hydro Tasmania and those with an indirect interest, often represented by community and interest group leaders.

Stakeholders who have a direct involvement in our operations through such activities as supplying goods and services or partnering developments have key contacts with the Corporation through their principal activity. Developments in our engagement model will centre on establishing a greater connection across the business for sharing information on issues that arise with these stakeholders to identify systemic opportunities for improving engagement and other procedures.

TIME WITH HYDRO TASMANIA
2 years

POSITION
Land Management Officer
Communications and External Relations

MICHAEL BIDWELL



“What is there not to enjoy? I work in some of the most beautiful places in Tasmania and perhaps in the world. Also I have the opportunity to contribute to the management and protection of these places into the future for my children and their children.

“I also work with dedicated people at Hydro Tasmania and others within agencies and interest groups who are passionate about protecting and managing these wonderful places.”

Table 13: Hydro Tasmania’s stakeholders and their attributes

Stakeholder	Attributes
Staff	Operate our business
Customers	Buy our electricity, energy products and our consulting services
Business partners	Join us to develop, construct and maintain renewable energy projects, and to research and trial renewable energy concepts and innovations
Stakeholder and Portfolio Ministers, Government of Tasmania	Nominal owners of the business on behalf of the people of Tasmania
Government agencies	Regulate our activities; join us to manage issues where our interests intersect
Regulators	Regulate our industry, its financial activities and the environment
Unions	Represent employees in negotiations for collective agreements and meet regularly with management about issues which affect employees
Community and special interest groups and bodies	Raise concerns, provide information on issues that arise and query our activities
Industry associations	Provide forums for industry debate, discussion and policy development on issues of mutual interest
Academic and scientific communities	Provide information, conduct research and query our methods of operation
State and Federal Parliamentarians	Represent our interests and question our motives
Suppliers	Provide goods and services, including contractors who supplement the workforce for special projects
Local and national media	Provide information to the public and question our operations and motives
Tasmanian community	Our ultimate owners who experience the impact of our principal operations first-hand

Community engagement and support

Tasmanian community

Our relationship with the Tasmanian community is of particular importance to us as they are most affected by our operations and activities. At times parts of the community have specific interests or issues with us, especially as a result of the multiple-use nature of the reservoirs and land under Hydro Tasmania’s management.

In order to increase our opportunities for formal engagement with the community we have been pursuing formal relationship models, including with community liaison groups on individual issues, such as Lake Margaret Power Station redevelopment (more on P45) and the review of cloud seeding operations, and through agreements such as with the Tasmanian Aboriginal Land and Sea Council (TALSC) (more on P46) and formal memoranda of understanding with local government associations and groups with which we have a common interest. MOUs were signed this year with NRM South and Hobart Water.

The annual Government Businesses Scrutiny Committees conducted by the Parliament of Tasmania



MARIAN PIEKUTOWSKI

**TIME WITH HYDRO
TASMANIA**
24 years

POSITION
Chief Engineer System
Integration
Business Development

“With the current focus on climate change and increasing reliance on renewable energy sources the future is exciting.

“I cherish the opportunity to work with and to be challenged by young people. They are the future of our organisation and we need to help them to build up experience.”

investigate issues of concern to the community arising from the Government’s enterprises.

The Chairman and CEO answered questions on Hydro Tasmania’s activities from Committee Members in an open forum. Hansard records the proceedings which are available online. The majority of queries in this year’s hearing were about our Balance Sheet, reliability of supply and water issues.

Community Survey

Hydro Tasmania measures community perceptions of, and attitudes toward, its performance in a regular survey.

The statewide survey was conducted in June 2008 by Symetrics with 406 respondents. The survey found the Tasmanian community considers Hydro Tasmania to be important to the State, performing well overall and trustworthy. Countering this are perceptions that Hydro Tasmania does not listen to or engage well with the community. An ongoing issue is that there is still confusion as to Hydro Tasmania’s main role as an energy generator with 37 per cent of respondents believing the business to be the State’s energy retailer.

Hydro Tasmania will assess the

results of the survey as it develops its stakeholder relationship model to determine how best to address weaknesses in its engagement with the wider Tasmanian community. It will conduct the survey on an annual basis to help identify and respond to emerging issues.

Industry

The community extends beyond our operational boundaries and includes the electricity and renewable energy community. Hydro Tasmania is an active participant in policy and regulatory development in areas which affect its business, including greenhouse gas emissions, energy markets and renewable energy deployment. Our activities include advocacy in the political and bureaucratic arena at State and Federal levels, as well as engagement with non-government industry associations and organisations, especially during recent years in relation to emissions trading and climate change advocacy. Our information sharing and policy development programs span the local, national and international spectrums.

Cloud seeding

Cloud seeding is a technique used to increase rainfall in a target area.

Hydro Tasmania has been involved in both operational and experimental cloud seeding over Tasmania and mainland Australia for over 40 years.

Cloud seeding is a material issue particularly to the west coast community, an area directly affected by our generation operations. The community has voiced concern over a number of years that cloud seeding changes the existing high rainfall patterns of the area. The concerns relate to both the social aspects of living in a wet climate as well as the perceived detrimental effects on the local economy. Hydro Tasmania and the West Coast Council jointly selected SGS Economics and Planning as an independent consultant to conduct a study into the impacts of the program. SGS concluded the study in April 2008 and released the report in June.

While acknowledging the differences of opinion that remain about the variability of weather patterns and the amount of scientific debate on cloud seeding, both parties recognised the importance and benefits of working together. The report found that cloud seeding plays a small but significant role in boosting rainfall over hydro storages in the region with on average only 20 seeding flights a year. However, negative community



End of the run: The Hydro Tasmania team after the City to Casino Fun Run

perception towards the program was largely as a result of a lack of information being available, as well as a lack of understanding about how cloud seeding works.

As a result of the study, Hydro Tasmania has improved its communications with the local community and will establish a joint community consultative group to work through possible initiatives in conjunction with the West Coast Council. Hydro Tasmania and the West Coast Council have agreed to work together to improve communications and address community concerns over the cloud seeding program.

The reports and more information are on the website.

In June 2007 Hydro Tasmania advised local government councils struggling with drought conditions that upon request we would extend our target area beyond

the central and western lakes and seed elsewhere if conditions were right. However the right conditions occurred only once during the 2007-08 cloud seeding season.

Sponsorship

Hydro Tasmania sponsors a number of initiatives and events throughout the State. Our approach to sponsorship is based on a fit with our strategic direction and supporting iconic organisations and events such as the Tasmanian Symphony Orchestra and the Ten Days on the Island arts festival. Hydro Tasmania is the naming rights sponsor for the annual Three Peaks Race, supports junior rowing and junior surf lifesaving, and continues to sponsor community events such as the Back to Pedder fishing competition and charities such as Camp Quality.

We also have partnerships with organisations such as the University of Tasmania and Greening Australia

Tasmania to support targeted programs while the business also sponsors our staff in events such as the City to Casino Fun Run.

In addition, Hydro Tasmania donates money to support staff activities in the community as well as specific events such as the ABC's Giving Tree.

Sponsorship and donations for 2007-08 totalled \$384 796.

Hydro Tasmania's people once again supported statewide community events, raising \$6260 for the Leukaemia Foundation's World's Greatest Shave event and \$11 262 for the Cancer Council's Relay for Life.

Hands On Energy Discovery Centre

"Hands On" continues to showcase electricity, market, environmental and renewable energy activities and is a rich educational resource for students and community groups, with 6398 students visiting



ROGER SPARROW

TIME WITH HYDRO TASMANIA

4 years

POSITION

Customer Originator Trading

“I was initially employed as a lawyer and now work in the customer and contract trading area where my primary role is to negotiate complex deals and manage the relationships we have with our major industrial customers.

“I still pinch myself when I think that I have a financial market job in my home town. When I returned from overseas I did not think such jobs existed in Tasmania.

“It is also a fascinating time to be working in the energy sector.

“The world is changing before our very eyes and energy issues are at the core of these changes.”

the centre this year, mostly from Tasmanian primary, secondary and tertiary institutions. Student interest is highest in renewable energy and environmental exhibitions and demonstrations. There were close to 500 other visitors from local businesses, conference visitors to Hobart and international delegations visiting Hydro Tasmania. For more about Hands On, see our website.

Suppliers and partners

Hydro Tasmania is placing increasing importance on relationships with suppliers and partners who demonstrate environmentally and socially responsible practices, and is becoming increasingly aware of the benefits of aligning with these peers and providers.

This is articulated in the Procurement Policy introduced in July 2007. Sustainable procurement practices include identifying opportunities to minimise our environmental and social impact. We will target better selection and storage of goods and services and improved disposal of replaced items,

and will work with suppliers to find ways to implement the practices.

The new business structure includes a centralised procurement team to implement this policy and focus on improvements to procurement into the future. This year the team developed a suite of standard procurement contracts which include dispute resolution procedures.

The challenge remains, when purchasing goods and services, to lift the importance of sustainability as a factor to be assessed alongside other criteria such as price and expertise.

Similarly, the challenge remains ahead for us to work with our suppliers to understand the mutual benefits of adopting sustainable practices to improve our combined environmental and social impacts.

Hydro Tasmania outsources two major operational activities. Transfield Worley Parsons carries out operations and maintenance of the Bell Bay Power Station, with Hydro Tasmania managing the site. Transfield Worley Parsons is

an invaluable partner in keeping Bell Bay operational under difficult conditions for contractors, given the age and condition of the plant. The contractors were particularly helpful in helping to find and install a replacement for a Bell Bay transformer after a failure in December 2007.

Additionally, information technology support services are supplied by LogicaCMG with Hydro Tasmania managing the IT infrastructure.

Contractors play a vital role for Hydro Tasmania, adding specialist expertise on various projects where needed. At 30 June, we employed 109 contractors in addition to our 819 employees.

Hydro Tasmania's Procurement Policy states that we will give consideration to local suppliers to ensure that our procurement assessment process does not unfairly disadvantage them in seeking to do business with Hydro Tasmania. Table 14 shows the breakdown of value of procurement for 2007-08. Tasmanian suppliers are defined as businesses operating



RANJITH PERERA



TIME WITH HYDRO TASMANIA

3 years

POSITION

Senior Engineer
Hydro Tasmania
Consulting

“My job is to carry out power system simulations to help customers connect their generators to the system. Every job we do is different. Therefore it opens up the mind and it never gets boring. Sharing information, finding solutions to the problems with my mates is a unique experience.

“Hydro Tasmania has the chance to be a role model for the next generation.

“I see my role in the future is to put on the client’s shoes when approaching a problem and think outside the box where possible.”

in Tasmania which have a permanent office or presence in Tasmania and employ Tasmanian workers. These figures exclude GST and supplies that are not procured competitively such as government charges, taxes and utility costs. The total figure includes \$58 million for purchasing gas.

Table 14: 2007-08 procurement value

	Number of Suppliers	Value (\$M)	% of spend
Tasmanian Suppliers	935	79.1	41.5
Interstate/Overseas Suppliers	713	111.7	58.5
TOTAL	1648	190.8	

Relationships with our joint venture partners continue to be good. A Hydro Tasmania renewable energy engineer was seconded to Hong Kong by the CLP Group to explore new projects. The South Australian Water terminal storage mini-hydro has performed above expectations. Improved maintenance and operations made the plant more available to take advantage of the good prices in the SA region of the NEM. In both ventures, regular meetings and collaboration on issues support the relationship.


Relationships with our partners in the Cathedral Rocks Wind Farm in South Australia have matured. The stay of arbitration with turbine supplier Vestas was released during the year with all legal matters resolved and operating issues rectified. The relationships with Vestas and the investor Acciona have become more collaborative in the past 12 months.


“Hydro Tasmania is placing increasing importance on relationships with suppliers and partners who demonstrate environmentally and socially responsible practices, and is becoming increasingly aware of the benefits of aligning with these peers and providers.”


Sustainability self-assessment in brief


2005-06 Score	2006-07 Score	2007-08 Target	2007-08 Score	2008-09 Target
3.3	3.0	3.4	3.6	3.5

For more information on scoring details and contributions, see Table 23.

 Community Survey showed trust in and recognition of Hydro Tasmania, yet confusion about identity, and that listening and engagement need to improve

 Working with the West Coast Council on improved communication around the cloud seeding program

 Dedicated team for stakeholder engagement

 Sustainable practice considerations have been introduced in the procurement policy, implemented during the year

Performance against 2007-08 commitments

Commitment	Progress
Increase sharing and learning around the key skills and behaviours for relationship-based stakeholder engagement, towards greater collaboration	 Workshops on listening skills in November-December 2007
Develop a collaborative program with Parks and Wildlife Service and Forestry Tasmania on the facilitation of visitor use in the South-West National Park	 Southwest Working Group formed and meets regularly
Develop a collaborative approach for managing recreational use of waterways in association with MAST, Inland Fisheries Service and Angling Alliance Tasmania	 Recreational Lakes Committee formed and operating
Establish an appropriate sourcing strategy for key categories of supply, and then develop suitable measures to drive improvements over time	 Sourcing strategy introduced for key categories of supply
Complete the socio-economic study into impacts of cloud seeding	 Completed in April 2008; published in June – available on our website

Commitment for 2008-09

- › Continue to establish relationships with stakeholder representative groups in our community, including formalising at least two more relationships via memoranda of understanding with environment or local government representative bodies
- › Develop two-way survey for Hydro Tasmania-supplier relationships and performance, where each considers and evaluates the other

OUR ENVIRONMENT





Book launch: Pictured at the launch of the oral history book *Ticklebelly Tales* are, from left, former Hydro worker Bill Tindall, Christina Giudici, Rossalyn Giudici and author Heather Felton

OUR ENVIRONMENT

Ecosystems and Heritage

Managing our environment for future generations is very much part of our mission for world-class asset and resource management.

Hydro Tasmania operates an ISO 14001 certified Environment and Sustainability Management System (ESMS) which drives continual improvements and best-practice environmental management. The certification was renewed following three independent audits during the previous year.

Total expenditure on environmental management was \$4.7 million, compared with \$4.3 million the previous year (Table 15).

Priority environmental risks, identified through the ESMS, are managed through the delivery of three key programs: the Aquatic Environment Program, the Land Management Program and the Cultural Heritage Program.

Hydro Tasmania has an ongoing training and auditing program for maintaining staff competence in the management of key environmental risks and activities.

Environmental priorities for 2007-08 were managing the low inflow impacts on the lakes and rivers, a review of land management, further studies to determine Aboriginal cultural heritage values on land Hydro Tasmania manages, and heritage impact studies of the Lake Margaret redevelopment. Publishing the oral history book, *Ticklebelly Tales and other stories from the people of the Hydro*, was a highlight and very satisfying after three years of preparation.

Table 15: Environmental expenditure

2007-08	2006-07	2005-06
\$4.7 M	\$4.3 M	\$5.8 M

Note: This expenditure was recorded for the primary purpose of environmental management.

Sustainability Code: We operate our business to provide future generations with a clean and healthy environment. We minimise our environmental impacts and protect heritage as we look towards the future.



Lake Burbury

Ecosystems

Aquatic program

The aquatic program aims to manage key aquatic environmental impacts from Hydro Tasmania's operations. This year the key projects centred on low lake levels, waterway health and Basslink monitoring.

Low lake level impacts

Hydro Tasmania's operations have the potential to impact on lake levels in ways which can lead to changes in the environmental health of waterways.

The low lake level environmental monitoring program, which commenced in the previous reporting period, was extended to 10 lakes in total with the addition of seven more during the year. Monitoring was continued at Great Lake, Lake Echo and Lake King William with Arthurs and Woods Lakes being incorporated into the program. After algal blooms were

found at Lake Echo, downstream lakes – Dee Lagoon, Bradys, Binney, Catagunya and Meadowbank – were also monitored. The Water Licence Regulator and major water users were informed of the monitoring results.

Risk bands of potential environmental and social impacts are applied to lake water levels so that the consequences are monitored should a decision be made to lower the level for a prolonged period to produce energy. Risk bands were developed for Arthurs Lake and Woods Lake.

Environmental trigger values, derived from Australia and New Zealand Environment and Conservation Council (ANZECC) guidelines are applied to water quality and ecological indicators except where sufficient information is available to determine lake-specific trigger values.

Threatened species are closely monitored. Observations in Great Lake led to investigating the

feasibility of providing barriers for refugia for the nine known threatened species in Elizabeth and Becketts bays. Regulatory stakeholders indicate they are supportive of the proposal.

The Inland Fisheries Service (IFS) discovered dead trout in ponds that had been recently isolated at Arthurs Lake. The water quality had also declined. Concerns over the risk to the threatened species of galaxiid populations prompted a joint operation between IFS and Hydro Tasmania to translocate any remaining galaxiids.

Recreational fishing is affected by the low lake levels. Hydro Tasmania developed memoranda of understanding with the IFS about responsibilities and responses to fluctuations in water levels of seven popular fishing lakes principally used for electricity production. The MOUs will operate continuously into the future, regardless of the longer-term changes to lake levels.



MELISSA JACKSON

TIME WITH HYDRO TASMANIA
3 years

POSITION
Industry Policy Analyst
Communications and
External Relations

“I have been working with people from across the business to find and implement ways to reduce Hydro Tasmania’s energy and carbon footprint from assets and operations as well as making a cultural change within the business.

“It is great to be at Hydro Tasmania right now particularly as my job is connected to the big issues facing the planet at the moment.

“Renewable energy is one of the key ways the world will be able to respond to the challenges of climate change and it’s important for me to feel like I can make a contribution to the environmental solutions we need.”

Safe water navigation for boats is at risk with obstacles emerging as lake levels recede. Hydro Tasmania, the IFS, Marine and Safety Tasmania (MAST) and the Angling Alliance Tasmania collectively manage this risk. Boat ramp infrastructure and access is managed by Hydro Tasmania, IFS and MAST.

Lagoon of Islands in the central highlands of Tasmania, is principally an irrigation storage providing water to the Ouse and Shannon rivers. Poor water quality has been a continual issue. In 2006-07, Hydro Tasmania developed a strategy to remediate the lagoon. As work progressed this year a new opportunity became apparent. Hydro Tasmania’s new proposal is that the Lagoon of Islands be rehabilitated and returned to a more natural state, as close as possible to the pre-dam ecosystem. This means the closure of Ripple Creek Canal and diversion of water from Ripple Creek and Noels Creek back along their natural watercourses to the Shannon River.

Algal blooms recurring at Lake Trevallyn have been monitored under a Collaboration Agreement implemented in 2007-08 between Hydro Tasmania and northern Tasmanian catchment stakeholders NRM North, Esk Water, the West Tamar Council and the Meander Valley Council.

Monitoring Basslink environmental effects

It is a requirement of the Water Licence that Hydro Tasmania provides an annual report on the effects of Basslink operations on the Gordon River. A range of scientific disciplines is monitored. These include water quality, fluvial geomorphology, karst geomorphology, riparian vegetation, macro invertebrates, fish, and benthic algae and moss. The report is published in October as the Gordon River Basslink Monitoring Annual Report and will be available on the Hydro Tasmania website.

Lake Fidler - meromictic lake

Hydro Tasmania has undertaken ongoing monitoring of the rare meromictic Lake Fidler in the World Heritage Area of the Gordon River basin. Meromixis is salt and fresh water stratified into two layers with salt water underneath. Monitoring during 2007-08 showed that the meromixis was declining more quickly than expected with complete mixing of salt and fresh water anticipated in 2008-09. After discussions with the Parks and Wildlife Service and key stakeholders, including the Tasmanian Wilderness World Heritage Area Consultative Committee and Professor Peter Tyler, it was agreed that future options for Lake Fidler would be reconsidered depending on collaboration and funding opportunities.

Subsequent to this agreement, a massive natural recharge took place when a major high tide brought a large quantity of salt water back into the lake adding at least two years to the meromictic life of the lake.



Lake Margaret Power Station

Land management

The Land Management Program aims to manage land environmental impacts from Hydro Tasmania's operations.

A number of key projects were implemented during the year for rehabilitation of contaminated sites, threatened species and weed management. A review of the program identified future priorities for land management actions.

Land management issues involving stakeholders are approached through groups such as the Southwest Working Group, comprised of Hydro Tasmania, Forestry Tasmania and the Parks and Wildlife Service, which deals with cross-agency responsibilities for areas including the World Heritage Area.

Many of Hydro Tasmania's operational areas are valued for recreational use. This year Hydro Tasmania, together with key stakeholders, developed plans to coordinate management of recreational activities on land

and water areas managed by the business. One such group is the Recreational Lakes Committee, comprised of representatives from community groups, government agencies and Hydro Tasmania.

Hydro Tasmania contributed \$59 761 this year to MAST as part of an agreement to contribute infrastructure funding for boat ramps, channel markers, signage and car parking for access to lakes and safety management for recreational users.

Contaminated sites

Work continued on remediation of contaminated sites with the focus on completing the rehabilitation of key historic development and construction sites in western Tasmania.

Rehabilitated sites have been incorporated into the Hydro Tasmania geographic information system (GIS) to enable future evaluation and assessment of performance.

Threatened species

Work has continued on developing strategies for managing threatened species habitats on Hydro Tasmania land with a continuing focus on the Ptunnara brown butterfly habitat and potential impacts on the native flora populations of *Babarea australis*.

Weed management

Hydro Tasmania has continued its commitment towards weed management through the purchase of a hygiene trailer for use by contractors and staff at identified weed sites.

The Southwest Working Group focused on gorse eradication, including land in and adjacent to the Tasmanian Wilderness World Heritage Area.

For more information on Hydro Tasmania's land management program, visit the website.



TONY FIELD

TIME WITH HYDRO TASMANIA

25 years

POSITION

Manager Major Projects
Business Development

“I believe we are in the right business at the right time as the true value of renewable energy is realised.

“Hydro Tasmania is uniquely positioned to springboard off its already significant renewable footprint to take a lead in Australia through the development of renewable technologies as they become more economically sustainable.

“The next decade promises to be an exciting period for Hydro Tasmania and the rest of the country.”

“The redevelopment of the Lake Margaret site has become a focal point for the cultural heritage program, working with the West Coast Council and the Lake Margaret Community Liaison Group to explore options for tourism developments for the power station and the village.”

Heritage

The Cultural Heritage Program focuses on Hydro Tasmania’s heritage values, identifying and managing our cultural heritage and creating awareness among staff and the community.

Oral history

The oral history book, *Ticklebelly Tales and other stories from the people of the Hydro*, written by Heather Felton, contains stories of social and cultural heritage interest covering the history of ‘the Hydro’ from the people who were there, working in the harsh early conditions in the construction camps, revelling in the village life later when conditions improved, right through many and varied tales to the present day. The book was three years in the making and became a journey in itself for the staff involved in the project. Our thanks go to Heather for her efforts in delivering what became a bestseller in Tasmania.

Lake Margaret

The redevelopment of the Lake Margaret site has become a focal point for the cultural heritage program, working with the West Coast Council and the Lake Margaret Community Liaison Group to explore options for tourism developments for the power station and the village. Other discussions are about the use of the King Billy pine to be salvaged from the demolition of the woodstave pipeline, an oral history project and web-based exhibitions.

When the lake level was lowered for technical reasons, heritage investigations revealed some historical features that were submerged for 100 years, such as a tram line, a stone wall and a coffer dam.

The redevelopment was also the main subject for discussion at regular meetings with the Tasmanian Heritage Council, an important stakeholder for the cultural program. Hydro Tasmania submitted a paper

to the heritage legislation review. The review was incomplete at June 2008. Australia's engineers, keen to learn about managing constructed heritage sites, are taking a great interest in Lake Margaret. Engineers Australia commemorated the historical engineering value of the power station with a plaque presentation and ceremony. Hydro Tasmania presented two papers to the Engineers Australia Biennial Conference, one on Lake Margaret heritage management and another on the assessment of Hydro Tasmania's historical sites for heritage values.

Aboriginal heritage

A significant milestone for Hydro Tasmania's relationship with the Aboriginal community was an agreement with the Tasmanian Aboriginal Land and Sea Council (TALSC) for more effective management of Aboriginal heritage sites on land owned or managed by Hydro Tasmania. The agreement clarifies the processes involved in identifying and managing Aboriginal heritage.

As a direct result of signing the TALSC agreement, Hydro Tasmania was invited to sign a regional partnership agreement with the Commonwealth, State and local governments and TALSC in February 2008. The purpose of the regional agreement is to establish a coordinated and sustainable approach to Aboriginal land management across Tasmania through training and employment in conservation and land management. This will provide opportunities for further collaboration with the Tasmanian Aboriginal community on land management issues.

Specifically to Hydro Tasmania sites, a predictive modelling project for Aboriginal heritage value was undertaken in 2007-08 based on field survey work at Lake King William and Lake Echo, which will report on the nature of any sites identified. Completion is expected later in 2008. There were no Aboriginal heritage incidents recorded for 2007-08 involving Hydro Tasmania employees or construction activities.

More information on the Cultural Heritage Program is available on the website.

Environmental incidents

There were seven incidents rated as 'minor but constituting material harm' recorded and reported to relevant authorities during 2007-08. Half of these were oil or chemical spills. No incidents reported were in higher categories of moderate, major, extreme or catastrophic.

The recorded incidents were:

- › 600 litres of oil spilled at Meadowbank Power Station - it was contained and cleaned up within the building and did not escape to the environment
- › 400 litres of diesel spilled on the ground at Strathgordon - it required the contaminated soil to be removed and a leaking underground pipe to be repaired
- › 10-20 litres of hydraulic oil was lost to ground at Lake Echo when an excavator clipper failed
- › potential water siltation due to a change to a work scope at Dee Dam that was not reassessed for environmental impact
- › incorrect procedures for controlled waste management at the Poatina Power Station which

resulted in waste erroneously placed in council landfill

- › a bank erosion issue near Lake Margaret Power Station which caused two full biocycle tanks to be dislodged with a risk of spillage – they were secured without spilling
- › a failure to undertake quarterly effluent sampling at the Gowrie Park sewerage ponds as required by the Environmental Protection Notice for the site - this was recorded in 2008-09 and resource issues have been resolved to ensure compliant sample-taking in future.

A bird strike at Cathedral Rocks Wind Farm was reported to the Commonwealth Department of Environment and Water Resources as a matter of public interest and to comply with Hydro Tasmania processes but was not required to be reported under regulatory obligations.



Dee Lagoon

“Hydro Tasmania’s climate change strategy, *Responding to a Changing Climate* developed during 2007-08, significantly builds on the actions and activities already in place that manage the impacts of climate change on our business.”

Climate Change

Climate change response strategy

Hydro Tasmania’s climate change strategy, *Responding to a Changing Climate* developed during 2007-08, significantly builds on the actions and activities already in place that manage the impacts of climate change on our business, reduce our emissions footprint and position the business to take advantage of the opportunities that will arise.

The strategy has three objectives:

- › to be carbon neutral by 2012
- › to grow the business through opportunities presented by climate change
- › to advocate for positive action on climate change.

The strategy includes having a specific role of a manager to coordinate the business-wide activities and a steering committee of senior managers to oversee the implementation of energy

efficiencies, ensure targets are embedded and resourced, issues are resolved and commitments are reviewed on a regular basis.

The framework of the strategy - see Figure 1 - addresses three drivers for climate change response:

- › ensuring business vulnerability to a changing climate is minimised through a comprehensive **adaptation** response
- › protecting and positioning Hydro Tasmania for **growth** in new markets with products that respond to customers’ needs
- › increasing business **value** through maximising the potential investment yield of Roaring 40s and other renewable energy investments.



KANE THORNTON

TIME WITH HYDRO TASMANIA

3 years

POSITION

Manager Climate Change Strategy Communications and External Relations

“I get to work on the leading edge of very complex and important public policy issues such as climate change. There’s no greater challenge right now, and that’s a real motivator for me.

“I am also privileged to work with people who are passionate about making a real difference and reducing emissions from Hydro Tasmania and their own lives.”

Adaptation: Understanding our climate change risks

An initial limited-scenario CSIRO study on potential climate change impacts conducted for Hydro Tasmania in 2004 indicated that rainfall variations are likely to lead to an overall decrease in Hydro Tasmania’s hydropower production.

Based on the results of this study, Hydro Tasmania investigated the impact on operations with various rainfall scenarios. The potential financial impacts of these changes are being modelled. Preliminary findings showed a potential decrease in electricity production of approximately six per cent across all catchments. The last 31 years rainfall and inflows have been adopted as a basis for future planning. This timeframe is currently considered as statistically significant and this assumption will be reviewed annually. The study has resulted in a downward revision to our previous assessment of the system’s annual average output. Hydro Tasmania has responded to this challenge through a project to increase the efficiency and output of the existing generation plant by 1000 GWh per annum.

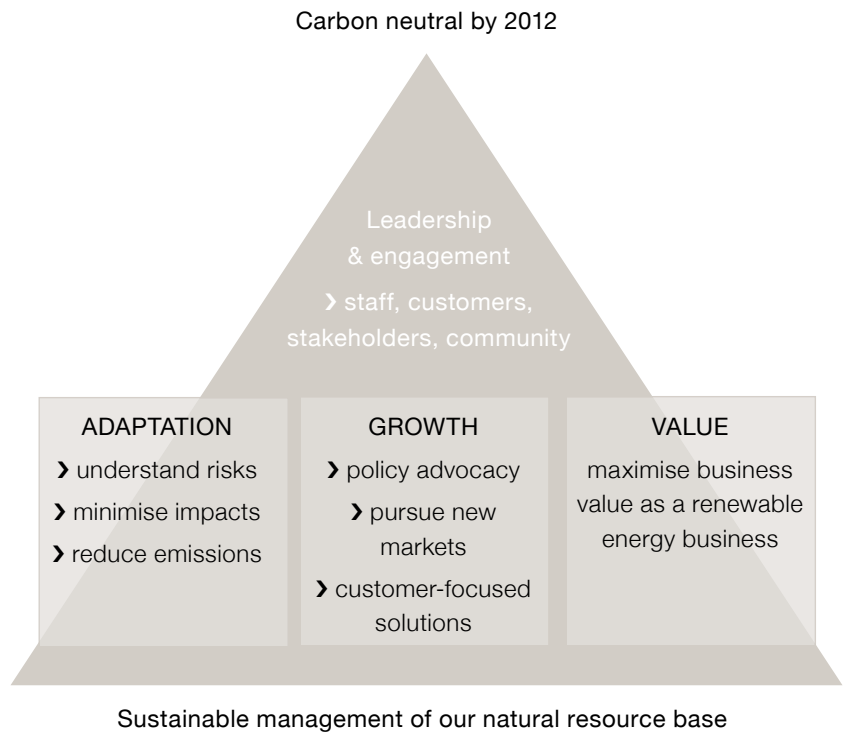


Figure 1: Hydro Tasmania’s framework for climate change action



JULIEN GASCHIGNARD



TIME WITH HYDRO TASMANIA

1 year

POSITION

Renewable Energy
Project Manager
Hydro Tasmania
Consulting, Melbourne

“My main role is to manage the development of wind farm projects.

“I can see Hydro Tasmania as an Australian leader in renewable energy with a variety of renewable technologies such as wave, solar, tidal and wind in operation.

“I am trying to be innovative and bring new solutions and leadership in my area of expertise.”

“Renewable energy developments and innovations will provide an opportunity to grow the business.”

Growth: Advocating for action

Government policies will play a key role in realising many business opportunities and ensuring positive action is taken on climate change.

Hydro Tasmania is active in encouraging action for greenhouse emission abatement, participating in State and Federal policy development, industry forums and engaging stakeholders. The proposed Carbon Pollution Reduction Scheme and renewable energy targets have kept us busy and we will continue to advocate for supportive policies in the Federal political sphere.

Market opportunities

Hydro Tasmania Consulting is meeting the emerging market for climate change response by adapting existing products and services for energy efficiency and water management, developing a suite of services relating to risk management, compliance and adaptive measures for climate change and extending its market for providing services to renewable energy developments.

The energy market provides opportunities for extending existing

product development and has signalled a range of future products. Hydro Tasmania will focus more on the renewable energy market niche for environmental products for renewable energy targets and carbon emissions trading.

Value: Maximising our renewable energy value

Hydro Tasmania believes that being carbon neutral will give us a competitive advantage in the renewable energy industry.

Renewable energy developments and innovations will provide an opportunity to grow the business. The main vehicle for renewable energy developments is Roaring 40s, a 50/50 joint venture with the CLP Group. These developments will contribute to global emissions reductions. We will add value to our Tasmanian base generation by increasing the efficiency and output of the existing hydropower system by 1000 GWh and by installing innovative renewable energy technologies on the Bass Strait islands.



Bell Bay Power Station

“Hydro Tasmania aims to be Australia’s first carbon neutral generator by 2012.”

Carbon Status

Hydro Tasmania aims to be Australia’s first carbon neutral generator by 2012. As a hydropower generator we have low operational greenhouse gas emissions (GHG) compared to other generators.

Hydro Tasmania started reporting its carbon footprint in 1997 with the Australian Government’s Greenhouse Challenge Plus program. This helped develop actions to manage emissions from our operations and facilities. In 2005-06, we introduced targets to reduce energy consumption across the business by 36 per cent over five years - see Table 16. This is now captured in our carbon neutral target. Hydro Tasmania’s target for 2007-08 was to reduce energy consumption across the business by 12 per cent on the base year of 2005-06 from three areas:

- › diesel use on the Bass Strait islands
- › fuel use in the vehicle fleet
- › electricity consumed in buildings and facilities.

Managing our emissions footprint

Our first step to reduce energy use has been to better understand our carbon footprint by implementing improved mechanisms to capture, monitor and report data.

Energy use

The majority of Hydro Tasmania’s emissions come from energy use (including electricity), vehicle fleet and diesel. A small percentage comes from non-energy sources such as sulphur hexafluoride (SF₆) used in electrical switchgear, waste and hydrofluorocarbons (HFC) from air-conditioning. For the first time the estimated amount of fuel used by staff on commercial flights has been included in our inventory - see Table 17.

Table 16: Targeted emission reductions and project offsets table

Year ending 30 June	Energy reduction/fuel substitution*	Offsets/other reductions
2008	12% reductions	Start purchasing offsets for staff flights
2009	22% reductions	Start purchasing offsets for Hydro Tasmania Consulting
2010	35% reductions	Close Bell Bay Power Station
2011	36% reductions	Start purchasing offsets for vehicle fleet
2012	Internal emissions reduced by 4900 tCO ₂ -e	Carbon neutral

* Targets are based on 2005-06 baseline

Table 17: Energy use comparison

Resource	Unit	Quantity 2007-08	Quantity 2006-07	Quantity 2005-06
Natural Gas (BB1&2)	GJ	12 325 189	9 301 774	6 040 904
Natural Gas (BB 3)	GJ	0	476 115	--
Natural Gas (Total)	GJ	12 325 189	9 777 889	6 040 904
Diesel (Islands)	kl	3862	4 037	4 092
Unleaded Petrol (Fleet)	kl	428	458	438
LPG (Fleet)	kl	0	1	7
Diesel (Fleet)	kl	315	317	266
ATK	kl	16	12	21
AvGas	kl	534	1	2
AvTurb	kl	67	51	63
Total Electricity Consumption	GWh	94	109	108

Note: AvGas – the variation from 1 kl in 2006-07 to 534 kl in 2007-08 reflects the addition of commercial flights in the calculations which previously were for chartered flights only.

The total electricity consumption figure has reduced significantly from 108 GWh to 94 GWh over the past three years. There is difficulty attributing this reduction until further analysis is conducted on actual consumption versus methodology changes to data collection and calculations.

Greenhouse gas emissions

A final assessment of the performance against the 12 per cent target was not completed within the timeframe for the Annual Report due to requirements to recalculate the base year according to the GHG Protocol Corporate Accounting Standard Principles arising from refinement to the Hydro Tasmania methodologies during this reporting period.

The performance against the target and an updated and complete inventory of Hydro Tasmania's GHG emissions for 2007-08 will be published on the Hydro Tasmania website at the end of the 2008 calendar year. Our preliminary estimate is presented in Table 18.

Hydro Tasmania's GHG emissions for 2007-08 were 725 177 tonnes CO₂-e, up by 81 902* tonnes CO₂-e on last year - see Figure 2.

* The figure of 81 902 is the difference between this year's total and last year's total of 643,275 tCO₂-e (0.0025%) which was recorded in the Annual Greenhouse Challenge Plus Progress Report, prepared after the 2006-07 Annual Report. Complete data was available at the time of the GCP report, which was not available for the Annual Report and is therefore considered to be the accurate version.

Table 18: GHG emissions totals 2007-08

HYDRO TASMANIA GREENHOUSE GAS INVENTORY				2007-08
EMISSIONS SOURCE	CONSUMPTION	UNITS	EMISSIONS	
				(tonnes CO ₂ -e)
DIRECT EMISSIONS				
GENERATION				
Natural Gas (large user)	12 325 189	GJ	703 768	
Industrial Diesel Fuel	3 863	kl	11 198	
FLEET				
Automotive Gasoline	428	kl	1 060	
Automotive Diesel	315	kl	912	
Aviation Gasoline (Avgas)	1	kl	3	
Aviation Turbine Fuel (Avtur)	67	kl	225	
Fuel Oil (transport)	0.02	kl	0	
LPG (transport)	0	kl	0	
FUGITIVE EMISSIONS				
SF ₆	9	kg	216	
HFCs	17	kg	123	
INDIRECT EMISSIONS FROM PURCHASED ELECTRICITY				
BUILDINGS & FACILITIES				
Purchased Electricity	94 618 100	kWh	5 039	
OTHER INDIRECT EMISSIONS				
BUSINESS TRAVEL				
Aviation Business travel - flights	533	kl	1 270	
Automotive Gasoline - Business travel	43	kl	11	
Automotive Diesel - Business travel	3	kl	1	
WASTE				
Recyclables, General Waste & Paper	2 262	m ³	324	
TRANSMISSION AND DISTRIBUTION LOSSES				
Emissions associated with the production and transmission of purchased electricity			1 025	
GROSS EMISSIONS (tonnes CO₂-e)			725 177	
OFFSETS				
Carbon Offset Purchases		Unit	0	
TOTAL OFFSETS				
TOTAL NET EMISSIONS:				
(Gross Emissions minus Sequestration and Offsets)			725 177	

In keeping with times of low inflow, over 97 per cent (703 768 tCO₂-e) of these emissions were from Bell Bay Power Station, which operated continually during the period – see Figure 3 on P54.

The remaining 21 409 tCO₂-e emissions, approximately three per cent, were from:

- › diesel power stations on the Bass Strait islands – 11 198 tCO₂-e
- › electricity used within offices, facilities and the generation network, principally pump stations – 5039 tCO₂-e
- › the vehicle fleet – 1972 tCO₂-e
- › commercial business flights – 1269 tCO₂-e
- › electricity lost in transmission - 1025 tCO₂-e
- › industrial process emissions of 663 tCO₂-e includes fugitive emissions from SF₆ in switch gear and HFCs in air-conditioning and general waste
- › the remainder is from small emission sources - see Table 18.

Notes: All emission calculations are based on emission factors provided in the Department of Climate Change NGA Factors (Feb 2008), except electricity consumption on the Bass Strait islands which is calculated based on the energy mix on the islands.



Supply and Inventory Officer Charlie Monteith

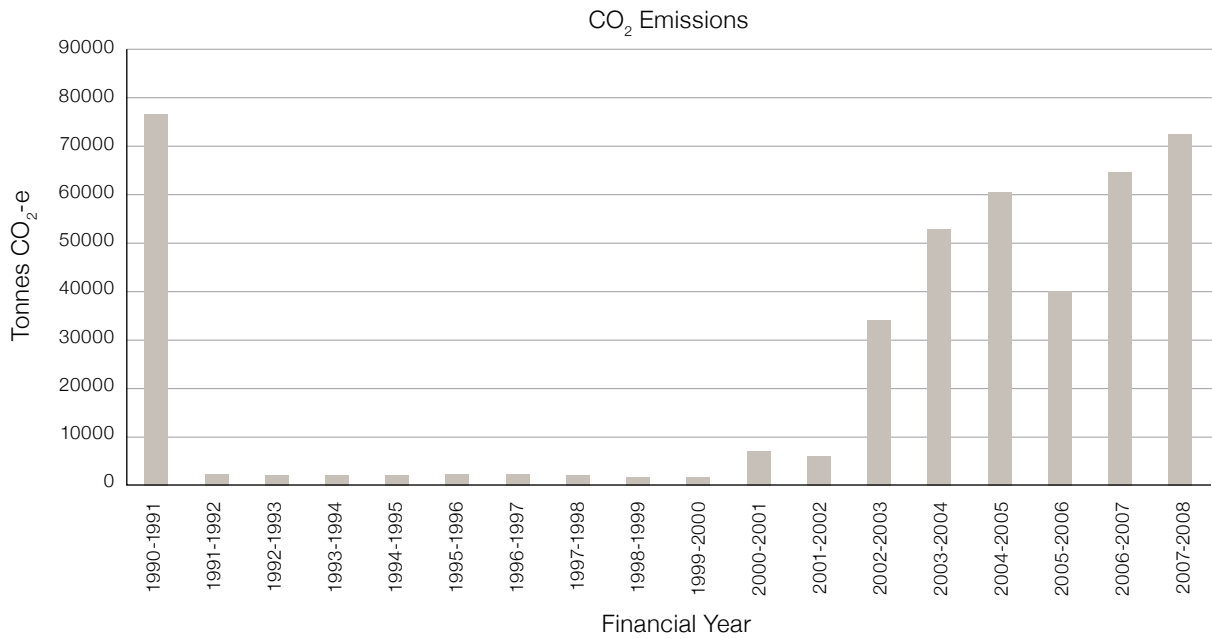


Figure 2: GHG emissions 1990-2008, showing increased use of Bell Bay Power Station during times of low inflow

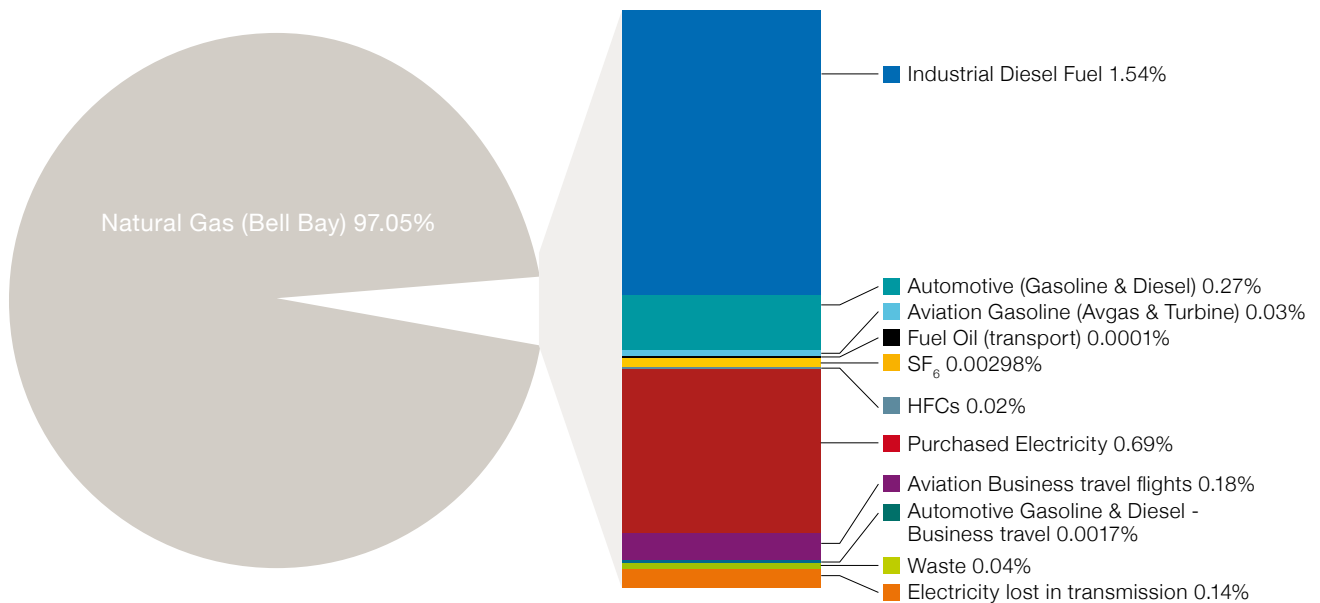


Figure 3: 2007-08 greenhouse gas emissions by source

Carbon intensity

Carbon intensity is a measure that allows direct comparison with other electricity generators. The GHG intensity is measured in tonnes of carbon dioxide equivalent per GWh of energy generation sent out (tCO₂-e/GWh).

A comparison of carbon intensity over three years is shown in Table 19. The increase is due to a range of factors, the most significant being the reduction in hydro generation and increase in natural gas generation.

Table 19: Carbon intensity

	2007-08	2006-07	2005-06
tCO ₂ -e/GWh	85.0	68.6	38.0

Diesel use on Bass Strait islands

Diesel use in the islands' power stations has reduced by 8 per cent since 2005-06 through a program of continual improvement with projects such as power station efficiency upgrades, fuel substitution, new technologies and demand side management.

During 2007-08, projects included:

- › upgrading King Island Power Station including replacing King Island diesel units 1 and 2 with more efficient units
- › installing resistor banks that reduce diesel use through more efficient use of wind energy
- › installing 100 kW of solar panels on King Island

- › jointly sponsoring the King Island Sustainability Program with the Tasmanian Government and community to utilise a series of business energy and waste audits.

Electricity use

In 2007-08, Hydro Tasmania's electricity use was 94.6 GWh, a significant reduction from 109 GWh in 2006-07. Despite this reduction, due to increasing emissions factors Hydro Tasmania GHG emissions have increased to 5039 tCO₂-e.

A target of 5 per cent reduction on energy use across buildings (excluding the generation system) was set for the year. Initial figures indicate a 20 per cent increase in electricity consumption. It is expected that this may be an overestimation due to a change

to the electricity billing data and collection processes during the year to prepare for future reporting requirements. At the time of printing the full reconciliation of the new versus old methods, which will distinguish between actual versus recorded consumption, had not been completed. A full reconciliation will be conducted early in 2008-09 to allow consistent year-on-year comparisons.

An energy audit of the Hobart office, the largest energy-using facility, and the Poatina Power Station identified many energy efficiency opportunities some of which will be implemented in 2008-09.



Fleet Manager Alan Johnson

Vehicle fleet

The vehicle fleet travelled almost 7.2 million km in 2007-08 consuming 743 kl of fuel (diesel and petrol) with an equivalent 1972 tCO₂-e (see Table 20). Hydro Tasmania has made efforts to reduce the carbon footprint of the vehicle fleet but did not achieve the 2007-08 energy reduction target of 4 per cent below 2005-06 levels. Over the past four years Hydro Tasmania has replaced 87 six-cylinder vehicles with four-cylinder vehicles, introduced people movers into field transport and provided a shuttle bus service between the Hobart and Cambridge office buildings. Commuter use is not part of vehicle fleet emissions but is a separate scope of emission which Hydro Tasmania does not currently report on.

Table 20: Vehicle use results

	2007-08	2006-07
Kilometres travelled	7 189 547	6 542 304
Kilolitres of fuel consumed	743	715
tCO ₂ -e emissions	1 972	1 991











Note. Despite using 28 kl more than the previous year, emissions dropped from 2006-07 due to a change in emission factors for petrol and diesel provided in the National Greenhouse Accounts (February 2008).

Increased fuel consumption has prompted further thinking on actions to reduce future use, such as expanding car pooling at power stations, including fuel efficient driving techniques in driver education courses, and purchasing vehicles with minimum greenhouse performance standards and fuel efficiency.

Sustainability self-assessment in brief

2005-06 Score	2006-07 Score	2007-08 Target	2007-08 Score	2008-09 Target
3.5	3.4	3.8	3.4	4

For more information on scoring details and contributions, see Table 23.

	Signed agreement between the Tasmanian Aboriginal Land and Sea Council (TALSC) and Hydro Tasmania
	Agreement from key stakeholders regarding Lake Margaret development
	Low lake level monitoring and reporting program extended
	ISO 14001 certification for ESMS
	Seven environmental incidents in the category 'minor but constituting material harm'
	Total greenhouse gas emissions for the period were 725 177 tCO ₂ -e, up by 81 902 tCO ₂ -e from 2006-07. This increase reflects the increased use of the gas-fired power station at Bell Bay
	Aim to be Australia's first carbon neutral generator by 2012. Data not yet available to report on 12% reduction target for energy use
	Developed a comprehensive climate change response strategy
	Reduced energy consumption through energy efficiency and reduction projects
	Substituting carbon intensive fuels such as diesel generation on King Island and the vehicle fleet

Performance against 2007-08 commitments

Commitment	Progress
Initiate remediation of Ripple Canal as part of the Lagoon of Islands Nutrient Management Strategy	Reassessed after investigation – a proposal to close the canal has been put forward 
Review low lake level management plans and activities and establish environmental and social risk bands for two more priority lakes	Completed; two lakes were added to risk band priorities 

Commitment for 2008-09

- › Develop new protocol with the Parks and Wildlife Service regarding World Heritage Area management
- › Aim to rehabilitate Lagoon of Islands to a wetland state
- › Reduce energy use by 22 per cent from 2005-06 base
- › Start purchasing offsets for Hydro Tasmania Consulting operations

OUR SUSTAINABILITY





Framework

Hydro Tasmania continues to use a sustainability self-assessment to measure progress on embedding sustainability practices into business activities based on a process developed within the Corporation in 2004. The Sustainability Policy was reviewed during 2007-08, a three-yearly review as specified in the policy. Actions included:

- › reviewing the existing Sustainability Policy and transforming the policy into a Sustainability Code
- › adjusting the sustainability self-assessment content to align with the Code
- › reviewing corporate key performance indicators to incorporate sustainability KPIs into the operational plan of the business.

Hydro Tasmania's business codes guide all business functions including policies and procedures.

Transforming the Sustainability Policy into a Sustainability Code is a further step towards embedding sustainability principles into how we conduct our business across all functions. The new Sustainability Code contains six sustainability principles which guide our business activities, decision-making processes and performance reporting.

These are Governance, Assets and Resource Use, Economic Performance, Employees, External Stakeholders, Ecosystems and Heritage.

These principles and their associated elements and the assessment against attributes are shown in Table 23.

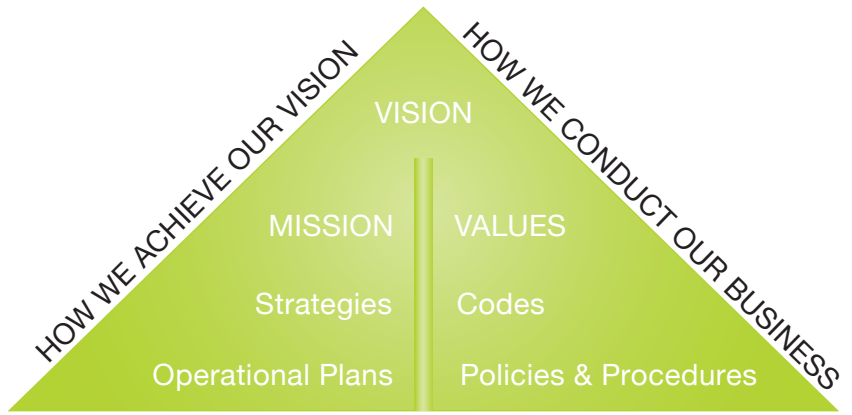


Figure 4: Framework for Code of Sustainability

Assessment

Hydro Tasmania's sustainability self-assessment process is based on the International Hydropower Association (IHA) Sustainability Assessment Protocol and the Global Reporting Initiative G3 guidelines. Following self-assessment Hydro Tasmania seeks external assurance of its Annual Report against the AA1000 Assurance Standard, its three principles of materiality, completeness and responsiveness. For the past four years this has been provided by Banarra Sustainability Assurance and Advice.

Information on the self-assessment process can be found on Hydro Tasmania's website.

Performance

Hydro Tasmania's performance against each of the six principles, including a summary of issues affecting the scores, is presented in Table 23 on P61.

Based on the self-assessment for 2007-08, Hydro Tasmania achieved an overall satisfactory sustainability performance level, with a score of 3.6 out of a possible 5. Our scoring system, described in Table 21, rates a score of 3 as satisfactory/average/moderate and a score of 4 as high/good to very high.

This year's score of 3.6 is an improvement on last year's score of 3.4. It is important to note that changes made to the sustainability self-assessment may have affected this score.

Performance is now based on average scores. Previously performance was based on weighted scores which have been adjusted to compare with this year.

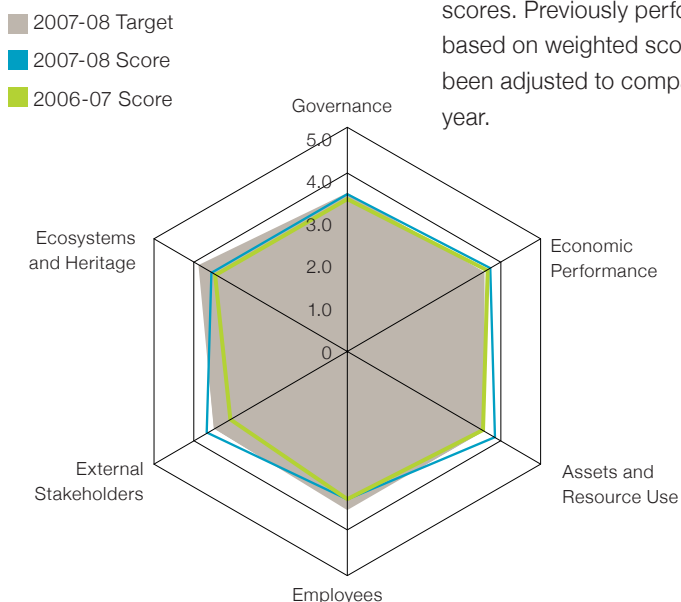


Figure 5: Sustainability performance for 2006-08

Table 21: Legend to scoring elements and attributes

Score	Performance/Process	Description
5	Outstanding/Strong/ Comprehensive	At or very near international best practice Suitable, adequate and effective planning and management systems Meets or exceeds objectives and measurable targets
4	High/Good to Very Good	High standard/above average performance Generally suitable, adequate and effective (minor gaps only) planning and management systems Meets most objectives and measurable targets, including all critical ones
3	Satisfactory/Average/Moderate	Average performance Generally compliant with regulations and commitments (minor exceptions only) Some gaps in planning and management systems Some gaps in meeting objectives and measurable targets
2	Below Average/Limited	Below average performance Some gaps in compliance with regulations and commitments Significant gaps in planning and management systems Significant gaps in meeting objectives and measurable targets
1	Poor/Very Limited	Poor performance (well below average) Major gaps in compliance with regulations and commitments Major gaps in planning and management systems Major gaps in meeting objectives and measurable targets
0	Very Poor	Very poor performance or failure to address fundamental issues Little or no compliance with regulations and commitments Ineffective or absent planning or management systems Fails to meet objectives and measurable targets

GRI application

Hydro Tasmania has assessed its G3 application level at B+ using the standard disclosures table shown below in Table 22. Banarra Sustainability Assurance and Advice provides an affirming opinion of this rating **P66**. A short version of the GRI reference index is shown on **P63**. Deviations from GRI protocols and information restatements are noted in a detailed reference index available on the Hydro Tasmania website.

Table 22: Standard disclosures for G3 application

Report Application Level		C	C+	B	B+	A	A+
Standard Disclosures	G3 Profile Disclosures	Report on: 1.1 2.1 - 2.10 3.1 - 3.8, 3.10 - 3.12 4.1 - 4.4, 4.14 - 4.15	Report Externally Assured	Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5 - 4.13, 4.16 - 4.17	Report Externally Assured	Same as requirement for Level B	Report Externally Assured
	G3 Management Approach Disclosures	Not Required		Management Approach Disclosures for each Indicator Category		Management Approach Disclosures for each Indicator Category	
	G3 Performance Indicators & Sector Supplement Performance Indicators	Report on a minimum of 10 Performance Indicators, including at least one from each of: Economic, Social and Environmental		Report on a minimum of 20 Performance Indicators, at least one from each of Economic, Environmental, Human Rights, Labour, Society, Product Responsibility		Report on each core G3 and Sector Supplement Indicator with due regard to the Materiality Principle by either: a) reporting on the Indicator or b) explaining the reason for its omission.	

Table 23: Sustainability Performance Summary

Principle	Element	Attributes	TARGET 2007-08 ¹	Total 2007-08 Score ²	
Economic	Long-term business value	Performance Growth in business value		4.0	
		Shareholder expectations in terms of: > returns to Government > maintaining security of supply for Tasmania		4.0	
		Process Long-term business planning		4.0	
		Processes in place to ensure that the business: > acts on behalf, and in the long-term best interest, of shareholders > increases the value of the business to the shareholders over the long term		4.0	
		subtotal		3.5	4.0
		Growth and customers	Performance Understanding and meeting customer requirements		
	Understanding short and likely long-term demand for service				3.0
	Identification and development of new solutions to meet changing market demands				3.0
	Commitment to product stewardship and sustainable pricing				4.0
	Compliance with appropriate ethical marketing and selling standards, legislative requirements, and other relevant commitments				3.5
	Commitment to research and development, including implementation of new and emerging technologies				3.3
	Process Process for understanding market conditions and influences				3.0
	Process for managing customer relationship life-cycle				3.5
	Strategic research and development program, including new and emerging technologies				3.3
	subtotal		3.5	3.4	
	TOTAL		3.5	3.7	
	Assets and Resource Use	Asset safety and reliability	Performance Dam, power station, and associated infrastructure safety performance		4.0
Assets (generators and turbines) and water resource: level of present reliability and likely future reliability				4.0	
Process Dam, power station and associated infrastructure safety program and plan				4.0	
Water management strategies and systems to ensure present and future reliability of the resource				4.0	
Emergency preparedness program to deal with unplanned asset failures and severe hydrological conditions				4.0	
sub total			3.5	4.0	
Resource use		Performance Practicable efficient use of the water resource in the context of the whole system			4.0
		Minimising the use of material and energy resources and the production of waste			3.0
		Process Water management strategies and systems to ensure efficient use of the resource in the context of the whole system			4.0
		Strategies and systems to ensure efficient use of material and energy resources and minimisation of waste			3.0
subtotal		3.5	3.6		
TOTAL		3.5	3.8		
Governance	Governance	Performance Vision, values, ethical standards, strategies, and business principles		4.0	
		Incorporation of key sustainability objectives in vision, values, ethical standards, strategies, and business principles		4.0	
		Meeting legislative and regulatory requirements and other commitments		3.0	
		Process Policy implementation, including management systems, monitoring for effectiveness, and review		3.0	
		Business structure, including Board and management structures, and defined roles, authorities, and responsibilities		4.0	
		Identifying legislative and regulatory requirements and other commitments, measuring conformance, and performance reporting		3.0	
TOTAL		3.5	3.5		

¹ Target scores may differ slightly from last year due to the introduction of the new Code of Sustainability and subsequent alignment of elements.

2006-07 Score	Key issues affecting self-assessment scores	Page no.
	<ul style="list-style-type: none"> ↑ Equity injection improves Balance Sheet 	3
	<ul style="list-style-type: none"> ↓ The short-medium term impact of low inflows will delay improvements in our long-term business value 	5
	<ul style="list-style-type: none"> → Consistent with 2007 Corporate Plan, no dividend was paid in the 2007-08 financial year 	12
	<ul style="list-style-type: none"> ↑ Carbon pricing has increased net asset value 	12
	<ul style="list-style-type: none"> ↑ Align business strategy with Sustainability Code 	12
	<ul style="list-style-type: none"> → Progression towards a commercial return over the next five years - this is likely to be reviewed in the event of adverse hydrological conditions 	12
4.0		
	<ul style="list-style-type: none"> → Consulting implemented an account management system and appointed Account Managers, focusing on understanding customer needs 	14
	<ul style="list-style-type: none"> → Long and short-term demand forecasting, monitoring of capacity and energy availability for the short term 	18
	<ul style="list-style-type: none"> ↑ Research and development (R&D) strategy developed which is aligned to business priorities and involves collaboration across the business 	13
	<ul style="list-style-type: none"> → Stringent internal management controls and obligations under financial market, trade practices and electricity market legislation and regulations 	14
	<ul style="list-style-type: none"> → Traders must take part in an extensive training program about compliance 	14
	<ul style="list-style-type: none"> → R&D projects continued to develop and implement new and emerging technologies, including King Island resistor and remote area power systems (RAPS) 	13
	<ul style="list-style-type: none"> → Hydro Tasmania maintains regular direct communications with key customers and participates in industry forums and committees 	32
	<ul style="list-style-type: none"> ↑ Participating in State and Federal policy development for greenhouse emission abatement 	50
	<ul style="list-style-type: none"> → Hydro Tasmania maintains regular direct communications with key customers and participates in industry forums and committees 	32
	<ul style="list-style-type: none"> ↑ Consulting introduces measurement of client satisfaction 	14
	<ul style="list-style-type: none"> ↑ Created and implemented a whole-of-business R&D strategy 	13
3.2		
3.6		
	<ul style="list-style-type: none"> ↑ No public safety or significant incidents associated with Hydro Tasmania dams were reported 	17
	<ul style="list-style-type: none"> ↑ Improved safety culture regarding assets 	17
	<ul style="list-style-type: none"> ↑ Risk management program monitors the condition of assets – improved monitoring for condition and performance 	17
	<ul style="list-style-type: none"> ↑ 1000 GWh project to maintain system capability of hydropower in the long term 	18
	<ul style="list-style-type: none"> ↑ Strategy to manage low inflows includes thermal generation and using Basslink facility for imports 	19
	<ul style="list-style-type: none"> ↑ Long-term reliability of water resource managed by balancing inflow with hydropower production 	19
	<ul style="list-style-type: none"> ↑ Long-term reliability of water resource management includes analysis of long-term rain patterns 	19
	<ul style="list-style-type: none"> ↑ Refined the five-year capital works program 	16
	<ul style="list-style-type: none"> ↑ An external review of compliance for several key asset safety requirements led Hydro Tasmania to make significant changes to the system to be more proactive, resulting in greater efficiencies 	17
	<ul style="list-style-type: none"> ↑ Biannual assessment of dam safety by ANCOLD 	17
	<ul style="list-style-type: none"> → Short-term use of thermal generation and use of Basslink import facility 	18
	<ul style="list-style-type: none"> → Long-term balance of inflow and hydropower production 	18
	<ul style="list-style-type: none"> → Emergency Response Plan for dam safety which is reviewed periodically 	18
3.4		
	<ul style="list-style-type: none"> → In the current low inflow conditions Hydro Tasmania has managed the water through a strategy to balance inflow and production, using thermal generation and Basslink facility for importing 	18
	<ul style="list-style-type: none"> ↑ Significant decreases in general waste disposal 	19
	<ul style="list-style-type: none"> → In the current low inflow conditions Hydro Tasmania has managed the water through a strategy to balance inflow and production, using thermal generation and Basslink facility for importing 	18
	<ul style="list-style-type: none"> ↑ Consolidated data collection for waste in Tasmania, excluding King Island 	19
3.5		
3.5		
	<ul style="list-style-type: none"> ↑ Introduced Code of Ethics 	21
	<ul style="list-style-type: none"> ↑ Sustainability Policy reviewed – introduced Sustainability Code 	59
	<ul style="list-style-type: none"> ↑ Sustainability KPIs developed to introduce into Corporation reporting process 	59
	<ul style="list-style-type: none"> → No material change in level or nature of compliance breaches 	22
	<ul style="list-style-type: none"> ↑ Policy framework reviewed to improve efficiency of decision making – reduced number of policies from 95 to 11 	21
	<ul style="list-style-type: none"> ↑ Independent review of Board's structure and performance 	21
	<ul style="list-style-type: none"> ↑ New business structure settled and management team has refined process to align operational plans to business strategy 	21
	<ul style="list-style-type: none"> → Continued to maintain Compliance Policy and process 	21
3.4		

Principle	Element	Attributes	TARGET 2007-08 ¹	Total 2007-08 Score ²	
Employees	Attraction, capability and retention	Performance			
		Workforce size and skill levels		3.0	
		Workforce social and gender balance		3.0	
		Level of employee satisfaction		4.0	
		Employee turnover and continuity		3.0	
		Process Attributes			
		Workforce planning and recruitment programs		3.0	
	Training and development programs		3.0		
	subtotal		3.5	3.2 ³	
	Safety, health and wellbeing	Performance			
Levels of employee safety, health, and wellbeing				3.0	
Process					
Employee safety, health, and wellbeing program			4.0		
subtotal		3.5	3.5		
TOTAL		3.5	3.3		
External Stakeholders	Community engagement and support	Performance			
		Level of stakeholder satisfaction and support		4.0	
		Process			
		Process for stakeholder engagement		4.0	
	subtotal		3.8	4.0	
	Suppliers and partners	Performance			
		Level of sustainability performance of partners, suppliers, and service providers			3.0
		Relationships with major partners, suppliers, and service providers			3.0
		Process			
		Goods and services specification / evaluation / selection process, including consideration of sustainability issues			3.5
Dispute resolution process				3.0	
subtotal		3.0	3.3		
TOTAL		3.4	3.6		
Ecosystems and Heritage	Ecosystems and heritage	Performance			
		Achievement of objectives for environmental health, including implementation of practicable opportunities to enhance environmental values		3.0	
		Agreement and support from regulators and other stakeholders		4.0	
		Influence on the behaviour of other resource users		3.0	
		Requirements / targets for protection and conservation of historic and indigenous heritage values		4.0	
		Process			
		Strategies and systems to measure environmental health, understand environmental values, and identify stakeholder concerns		3.0	
		Program and plans to establish and achieve environmental objectives		3.0	
	Planning consistent with relevant legislation and international standards		4.0		
	subtotal		3.8	3.4	
	Carbon status	Performance			
		Tonnes of CO ₂ equivalent			3.0
		Success in meeting objectives of plans to reduce GHG emissions			3.0
		Process			
Comprehensiveness of planning to reduce GHG emissions, including:				4.0	
> analysis of opportunities associated with GHG reductions > reporting and measuring performance > objectives and targets					
subtotal		3.7	3.3		
TOTAL		3.8	3.4		
Sustainability Score			3.6	3.6	

Legend

↑ Activity improved score → Activity maintained score ↓ Activity reduced score

² All scores are averaged, previous years' scores were weighted.

³ This score appears to have declined, however this is a result of the new scoring system, not a reflection on actual performance.

2006-07 Score	Key issues affecting self-assessment scores	Page no.
	→ As a result of restructure, workforce size retained; skills more aligned to business strategy	25
	→ External gender diversity review acknowledges a gender imbalance in the electricity industry sector and provides recommendations to Hydro Tasmania for improvements	28
	↑ Increased employee satisfaction and engagement score to 87% - up from 59%	27
	↓ Employee turnover increased - 15.8% was above the KPI of 10% - attributable to the organisational restructure	26
	↑ Internal recruitment preferred to fill new positions in restructure	25
	→ Training across the business in various processes – compliance, trading, dam safety, technicians, EEO, safety, environment and heritage	26
	↑ Graduate and leadership programs revised	26
3.3		
	→ Maintained levels of safety	30
	↑ Initiated the Safety Improvement Plan based on 6 safety priorities	29
	↑ Revised Healthy Hydro Program to target greater participation across the business	31
3.4		
3.3		
	→ Community Survey showed trust in and recognition of Hydro Tasmania, yet confusion about identity, and that listening and engagement need to improve	34
	↑ Memorandum of Understanding with NRM South and Hobart Water	33
	↑ Working with the West Coast Council on improved communication around the cloud seeding program	34
	↑ Hands On Energy Discovery Centre has nearly 7,000 visitors	35
	↑ Dedicated team for stakeholder engagement	32
3.5		
	↓ Challenge remains to assess sustainability performance of partners, suppliers and service providers	36
	↑ Resolution of key issues regarding operation of Cathedral Rocks Wind Farm, South Australia	37
	↑ Relationship with CLP on Roaring 40s joint venture continues to be positive	83
	↑ Good outcomes for terminal storage mini-hydro in South Australia	37
	↑ Sustainable practice considerations have been introduced in the procurement policy, implemented during the year	36
	↑ Developed a suite of standard form contracts based on Australian Standards which contain dispute resolution processes	36
2.5		
3.0		
	→ Lagoon of Islands remediation strategy progressed	43
	↑ Low lake level management risk bands and programs reviewed and environmental and social risk bands developed for two more priority lakes	42
	↑ Signed agreement between the Tasmanian Aboriginal Land and Sea Council (TALSC) and Hydro Tasmania	46
	↑ Memorandum of Understanding with Inland Fisheries Service	42
	↑ Stakeholder interest groups formed to manage land issues, the Southwest Working Group and Recreational Lakes Committee	44
	↑ Agreement from key stakeholders regarding Lake Margaret development	45
	↑ Predictive modelling project for Aboriginal heritage value	46
	→ Environment and Sustainability Management System (ESMS)	41
	↑ Low lake level monitoring protocol	42
	→ Lagoon of Islands Nutrient Management Strategy	43
	↑ Low lake level monitoring and reporting program extended	42
	↑ Algal bloom monitoring at Lake Trevallyn	43
	→ ISO 14001 certification for ESMS maintained	41
	↓ Eight environmental incidents in the category 'minor but constituting material harm'	46
	↑ No penalties for environmental incidents	46
3.5		
	↓ Total greenhouse gas emissions for the period were 725 177 tCO ₂ -e, up by 81 902 tCO ₂ -e from 2006-07 - this increase reflects the increased use of the gas-fired power station at Bell Bay	52
	↑ Aim to be Australia's first carbon neutral generator by 2012	47
	→ Continued participation in the Greenhouse Challenge Plus program	51
	↑ Developed a comprehensive Climate Change Response Strategy (CCRS)	47
	↑ Reduced energy consumption through energy efficiency and reduction projects	52
	↑ Substituting carbon intensive fuels such as diesel generation on King Island and the vehicle fleet	13
	↑ Establishing a revised reporting system for the new National Greenhouse and Energy Reporting Scheme	51
3.3		
3.4		

GRI Content Index 2007-08

- reported
- partially or indirectly reported
- not reported

This table includes partially and indirectly reported indicators, using the GRI Sustainability Reporting Guidelines (G3 Guidelines).

There is a table of complete GRI indicators and page/website references on the Hydro Tasmania website.

GRI Indicator	Report Section	Ref
Strategy and Analysis		
1.1, 1.2	Chief Executive's Report	5
1.2	Statement of Corporate Intent	78
Organisational Profile		
2.1-2.10	Hydro Tasmania's Profile	79
Report Parameters		
3.1-3.8, 3.11	About This Report	87
3.9-3.10	Table of complete GRI indicators on the Hydro Tasmania website	Website
GRI Content Index		
3.12	GRI Content Index	This index
Management Disclosures	Table of complete GRI indicators on the Hydro Tasmania website	Website
Assurance		
3.13	Our Sustainability	59
Governance		
4.1-4.3, 4.9, 4.10	The Board	72
4.4	Table of complete GRI indicators on the Hydro Tasmania website	Website
4.1	Hydro Tasmania's Profile	69
4.5-4.8	Hydro Tasmania website	Website
4.8	Our Sustainability	59
4.9, 4.10	Governance	21
Commitment to External Initiatives		
4.11	Sustainability Code and Environmental Policy	Website
4.12, 4.13	Hydro Tasmania's Profile - Membership of associations	69
4.12	Our Sustainability	59
	Climate Change	47
Stakeholder Engagement		
4.15	Hydro Tasmania's Profile - Stakeholders	69
4.14-4.17	External Stakeholders	32
4.16	Employees	25
4.15, 4.17	About This Report	87
Economic Performance Indicators		
Management approach	Statement of Corporate Intent	78
EC1, EC2, EC4	Economic Performance	11
EC1, EC6	External Stakeholders - Community engagement and support	33
EC2	Climate Change	47
EC1, EC3, EC4	Financial Statements	91
EC6	Hydro Tasmania website	Website
EC8	Ecosystems and Heritage - Land management	44
EU1	Statement of Corporate Intent	78
EU5, EU12	Assets and Resource Use	16
EU7	Economic Performance - Growth and customers	13
Environmental Performance Indicators		
Management Approach	About This Report	87
	Statement of Corporate Intent	78
	Ecosystems and Heritage	41
	Assets and Resource Use	16
	Environmental Policy and Our Environment pages on the Hydro Tasmania website	Website

EN3-EN5, EN6, EN7, EN16-EN18, EN29	Ecosystems and Heritage - Carbon Status	51
EN16-EN18	Climate Change	47
EN9, EN12, EN13, EN14	Ecosystems and Heritage - Aquatic program	42
EN9, EN12, EN26, EU14	Hydro Tasmania website	Website
EN12, EN13, EU14	Ecosystems and Heritage - Land management	44
EN22	Assets and Resource Use - Resource use	16
EN23, EN29	Ecosystems and Heritage - Environmental incidents	46
EN28	Governance - Compliance	22
EN26, EN30	Ecosystems and Heritage	41
Human Rights Indicators		
Management Approach	The majority of the human rights indicators are not reported by Hydro Tasmania because it operates primarily in a country strictly regulated for human rights. Currently do not have an approach for employees human rights issues in India. EPAs contains approach on freedom of association and grievances. TALSC agreement on Aboriginal heritage values.	29 46
HR4, HR9	Governance - Breaches	22
HR4, HR5	Employees - Attraction, capability and retention	26
Labour Indicators		
Management Approach	Careers pages of the Hydro Tasmania website, particularly benefits and safety. The Employee Policy Manual for the India office contains information that labour/management relations, OH&S, training and development and EEO conditions are comparable to those for employees in Australia	Website
LA1-LA4, LA11, LA13, EU15	Employees - Attraction, capability and retention	26
LA5	Table of complete GRI indicators on the Hydro Tasmania website	Website
LA6, LA7, LA8	Employees - Safety, health and wellbeing	29
EU16	External Stakeholders - Suppliers and partners	36
Product Responsibility		
Management Approach	The majority of the product responsibility indicators are not relevant to Hydro Tasmania. However, where relevant, Hydro Tasmania acts in accordance with its Compliance Policy.	Website
PR5, PR7	Economic Performance - Growth and customers - Consulting	14
PR9	Governance - Compliance	22
Society		
Management Approach	Hydro Tasmania's Bribery and Corruption, Compliance, Environmental and Sustainability policies Climate Change	Website 47
S01, S05, EU18	External Stakeholders	32
SO3, SO4, SO6, SO7	Table of complete GRI indicators on the Hydro Tasmania website	Website
S05, EU18	Climate Change	47
SO2, SO8, EU24	Governance - Compliance	22
SO1, EU18	Ecosystems and Heritage	41
EU20, EU29	Assets and Resource Use - Asset management	16
GRI indicators not reported		
EC5, EC7, EC9, EN1, EN2, EN8, EN10, EN11, EN15, EN19, EN20, EN21, EN24, EN25, EN27, HR1, HR2, HR3, HR6, HR7, HR8, LA9, LA10, LA12, LA14, PRI, PR2, PR3, PR4, PR6, PR8, EU2, EU3, EU4, EU6, EU8, EU9, EU10, EU11, EU13, EU17, EU19, EU21, EU22, EU23, EU25, EU26, EU27, EU28	Not reported. A more detailed GRI reference table is available on the Hydro Tasmania website. Reasons for GRI indicators not being reported are addressed in that table.	

Independent Assurance Statement

Hydro Tasmania Annual Report 2008



To Hydro Tasmania's stakeholders

Banarra Sustainability Assurance and Advice (Banarra) was commissioned by Hydro Tasmania to assure its Annual Report 2008 (The Report) against the AA1000 Assurance Standard. In conformance with the Standard, our approach assures in terms of materiality, completeness and responsiveness – in other words, we assure whether The Report identifies and discusses the most important issues to stakeholders and that the information is reliable and meaningful. In addition, Banarra undertook a validation of The Report against the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines.

This is Banarra's fourth reporting cycle with Hydro Tasmania, so we have built on our previous understanding of the organisation and its progress.

Summary

We believe The Report provides a fair and balanced representation of Hydro Tasmania's material (most important) sustainability performance areas, issues and responses for 2008 in a way that allows stakeholders to make informed decisions. We were pleased in particular with Hydro Tasmania's frank discussion of the drought's impact on its sustainability performance during the reporting period. Nevertheless, we have identified opportunities for improvement within this statement and these are presented in more detail in a report to Hydro Tasmania management.

Assurance scope

The scope of our assurance included data and claims relating to Hydro Tasmania in all sections of The Report, with the exception of the Statement of Corporate Intent and the Financial Statements. While we provide no opinion on the self-assessment performance descriptions or scores, we conducted a review of the sustainability self-assessment methodology and our findings are below.

Banarra Assurance Methodology

We developed a register of material performance areas and issues, identified through research based on the AccountAbility five-part materiality test. This included interviews with five of Hydro Tasmania's external stakeholders and all nine Executive Team members, including the CEO Vince Hawksworth. Reviews were conducted of internal documentation including policies, surveys and Executive Board papers. We also carried out internet-based research for sector issues, standards and peer sustainability reporting.

Our criteria found 20 issues to be material and these focused our testing of The Report. All testing was carried out at Hydro Tasmania's head office in Hobart, Australia. Testing included developing audit trails, investigating assumptions, reviewing data generation procedures and conducting interviews with 41 data owners.

This testing enabled us to take a view on the materiality, completeness and responsiveness of The Report, along with the level of application of the GRI Sustainability Reporting Guidelines.

For the sustainability self-assessment review we interviewed 11 participants and reviewed the methodology.

Materiality – has Hydro Tasmania identified what's important?

The majority of the material issues we identified are acknowledged in The Report. The only material issue not identified was the year's Basslink outages.

Hydro Tasmania's materiality process did not include a comprehensive approach to engaging with its stakeholders so was unable to demonstrate how the report content was drawn from the results of stakeholder engagement. The systematic process used last year for evaluating and prioritising stakeholder issues was not used this year. Consequently some issues were excluded from the initial draft report, therefore we recommend the process be re-established.

Completeness - has Hydro Tasmania understood these issues?

Hydro Tasmania has articulated its understanding of most of its material issues in The Report in a way that informs stakeholders. We were pleased with the significant discussion of the challenges in managing Hydro Tasmania's sustainability performance during the drought.

Stakeholders would have benefited from greater discussion of the potential impact of the Tasmanian government's direction to prioritise reliability of electricity supply on the corporation's carbon neutrality objectives, within the context of continuing drought and reliance on Bell Bay and Basslink.

Hydro Tasmania's strategy is to build water storages through the use of Bell Bay and Basslink. However, there is no discussion in The Report of the broader carbon impacts of this strategy.

The Hydro Tasmania Consulting business in India is excluded from The Report scope and in future we recommend its inclusion.

We identified a number of errors in the figures and claims presented. All were addressed and corrected in The Report. While Hydro Tasmania presents year on year data in many areas, there remains an opportunity to provide trended data to improve understanding of relative performance. For example, redundancies would benefit from being trended.

Responsiveness - has Hydro Tasmania responded to these issues?

The Report contains Hydro Tasmania's responses to most of its material issues. We believe Hydro Tasmania's response to its community survey findings could be more fully described.

We were pleased to note the review and improvement of the sustainability self-assessment process. Notwithstanding, we believe the self-assessment process would benefit from a more central and formal positioning within Hydro Tasmania's approach to business planning and management. There is also an opportunity for the self-assessment process to better ensure the various parts of the organisation are engaging with their stakeholders, identifying their stakeholder issues and appropriately responding.

Hydro Tasmania responded to most of the opportunities we identified in our assurance statement last year. One key opportunity yet to be responded to was addressing the tension between completeness and conciseness by putting more data online.

We believe Hydro Tasmania has adequate resources to enable the implementation of the commitments articulated in The Report. However, if the low water inflows continue, this may see some priorities change.

Global Reporting Initiative

We concur with Hydro Tasmania's own assessment that they have achieved GRI application level B+. We note that there was an increase in the provision of management approach disclosures as encouraged in last year's assurance statement and that some of the GRI Electric Utility Sector Supplement indicators were addressed.

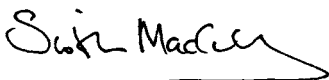
Independence

Banarra was paid by Hydro Tasmania to conduct this assignment. Other than this payment the assurance team declares itself independent in relation to Hydro Tasmania and its stakeholders. There is a detailed statement on our independence, impartiality and competencies at www.banarra.com.



Richard Boele

Certified Lead Sustainability Assurance Practitioner IRCA No. 1188527



Siobhan MacCarthy

Sustainability Assurance Practitioner

Banarra Sustainability Assurance and Advice, Sydney, Australia

29 September 2008

OUR BUSINESS





OUR BUSINESS

“Hydro Tasmania is Australia’s leading renewable energy business, and focuses its business initiatives on the renewable energy market.”

Hydro Tasmania’s profile

Hydro Tasmania is the trading name of the Hydro-Electric Corporation, incorporated in the State of Tasmania with its head office in Hobart, Tasmania and regional offices in Melbourne, Adelaide and New Delhi, India. It is 100 per cent owned by the State of Tasmania. The ownership structure is shown in Figure 6 and the business structure in Figure 7.

Hydro Tasmania is Australia’s leading renewable energy business and focuses its business initiatives on the renewable energy market. It provides energy to the National Electricity Market (NEM) and energy and environmental products to NEM participants. Hydro Tasmania Consulting provides clients with energy and water solutions in the areas of hydropower and renewable energy, dams, catchment management, environment and power engineering in the Asia-Pacific region. Hydro Tasmania also provides telecommunication services to the

Tasmanian electricity industry. During the year we negotiated the sale of this division to Transend Networks Pty Ltd and, subject to legal arrangements being finalised, the sale is anticipated to be concluded in October 2008.

Key impacts, risks and opportunities of the business environment for the Corporation are provided in the Statement of Corporate Intent on P78.

Table 24: Hydro Tasmania’s scale at 30 June 2008

Number of employees - Australia	819
Number of employees – India*	17
Total revenue	\$470 million
Total equity	\$1396 million
Electricity generated	8269 GWh
Total assets	\$4.8 billion

* Hydro Tasmania works on the assumption that local people are hired. There is one expatriate employee.

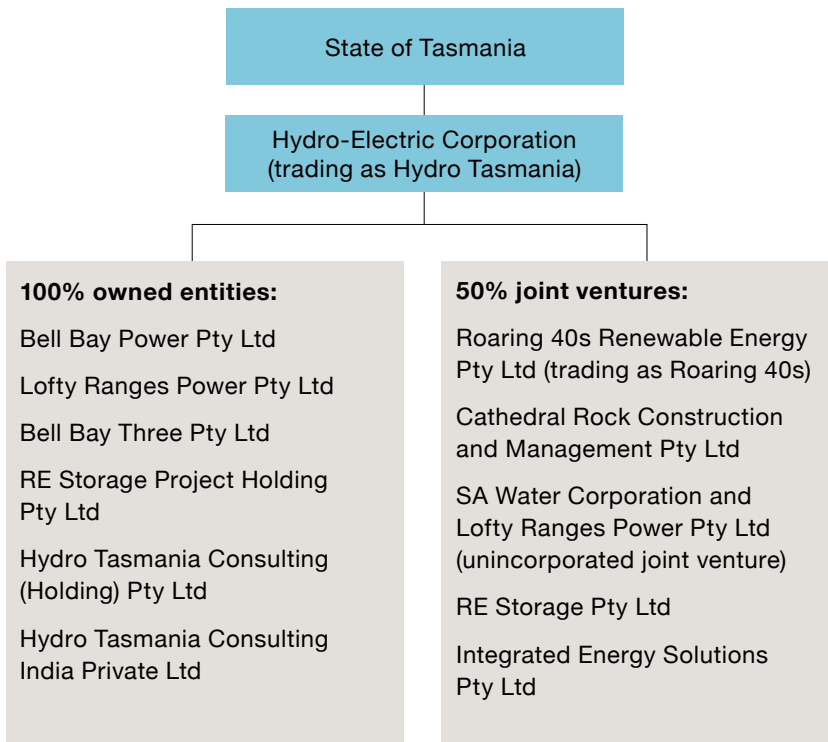


Figure 6: Hydro Tasmania's ownership structure

Significant events for 2007-08

The ongoing drought has continued to adversely affect our financial, social and environmental performance through lower lake levels, in turn resulting in reduced ability to generate hydropower, greater impact on recreational activities associated with our water assets and greater environmental impact.

The Balance Sheet has improved following an equity injection from the Tasmanian Government of \$220 million and \$50 million specifically to invest in Roaring 40s renewable energy developments.

Hydro Tasmania has developed a climate change response strategy which outlines the future direction of the business in relation to climate change activities **P47**.

Stakeholders

Hydro Tasmania currently identifies and engages with stakeholders who are likely to be impacted by its operations, and with whom we have shared issues of interest or concern. Stakeholder groups and their attributes are listed in Table 13 on **P33**.

Awards

Hydro Tasmania received three awards during 2007-08, all relating to the Annual Report 2007.

They were:

- esaa Sustainability Report Award 2007, winner
- Australasian Reporting Award 2007, bronze award
- Tasmanian Audit Award, overall winner of the Businesses and Companies Category for Financial Statement Working Papers 2006-2007, presented in May 2008.

Membership of associations

Hydro Tasmania is a financial member of the following strategic industry bodies and associations:

International Hydropower Association (IHA) * ^

Energy Users Association of Australia

Environment Business Australia

Clean Energy Council * ^

APP Renewable and Distributed Energy Generation Task Group * esaa (Energy Supply Association of Australia) *

National Generators Forum (NGF) * ^

Australasian Emissions Trading Forum Business Roundtable

Australian Financial Markets Association (AFMA) **

Australian Energy Alliance *

IEA Wind Hydro Integration Working Group *

CIGRE

Australian Science Teachers Association *

Australian Institute of Energy *

Australian Water Education Network *

* denotes committee membership

^ denotes a position held in governance bodies

Legislative framework

Hydro Tasmania is the trading name for the Hydro-Electric Corporation, which is a registered business, 100 per cent owned by the State of Tasmania.

It operates under, and is subject to, two State Acts - the *Government Business Enterprises Act 1995* and the *Hydro-Electric Corporation Act 1995*. Its water licence is issued pursuant to the *Water Management Act 1999*.

The Honourable David Llewellyn MHA, Minister for Energy and Resources, has portfolio responsibility for Hydro Tasmania.



Field trip: Hydro Tasmania Directors, from left, Sally Farrier, Michael Cavell and Stan Kalinko, with Aquatic Environment Program Manager Alison Howman at the Lagoon of Islands

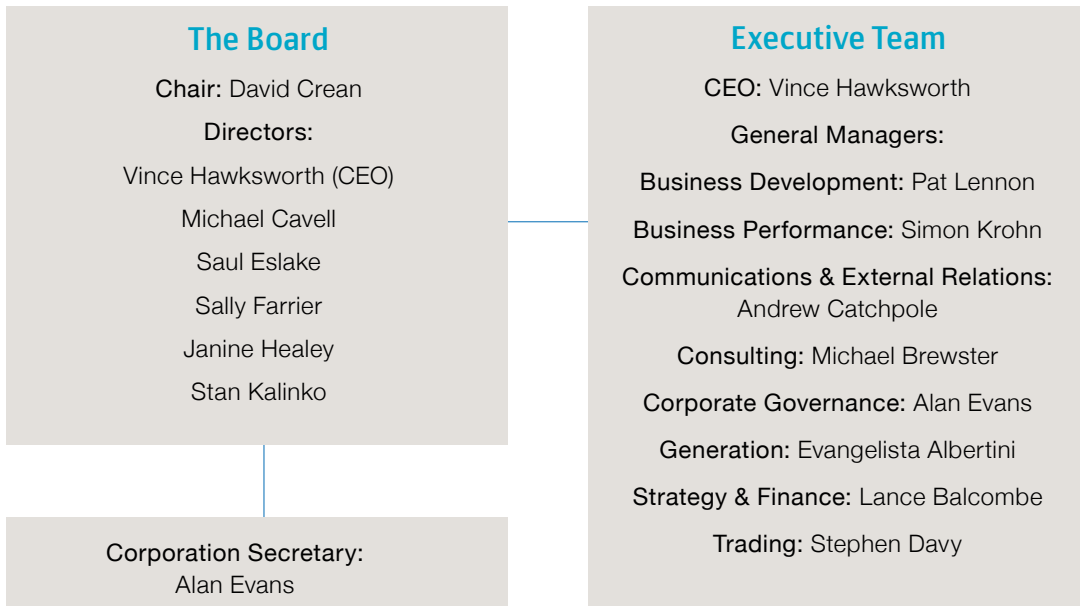


Figure 7: Hydro Tasmania's business structure at 30 June 2008



The Board: From left, Vince Hawksworth, Saul Eslake, Sally Farrier, Chairman David Crean, Janine Healey, Stan Kalinko and Michael Cavell

“At 30 June 2008, the Board consisted of seven directors. The Chief Executive Officer is the only director who is also an executive of the Corporation.”

The Board

At 30 June 2008, the Board consisted of seven directors. The Chief Executive Officer is the only director who is also an executive of the Corporation. Three members completed their terms during the year – Mr Don Challen, Mr Ken Baxter and Ms Melanie Willis – and one new appointment was made in March 2008, Mr Saul Eslake.

Dr David Crean (57) was appointed a director of the Hydro-Electric Corporation on 12 July 2004 and chairman on 24 September 2004.

Dr Crean was Treasurer of the State of Tasmania from August 1998 to his retirement from the position in February 2004. He was also Minister for Employment from July 2002 to February 2004, Member of the Legislative Council from 1992 to May 2004, and a Member of the House of Assembly between 1989 and 1992. From 1993-98 he held Shadow Portfolios of State Development, Public Sector Management, Finance and Treasury.

He holds a Bachelor of Medicine and Bachelor of Surgery degrees from Monash University.

Vince Hawksworth (49) took up his position as Chief Executive Officer on 1 August 2006.

Prior to his appointment, Mr Hawksworth was General Manager Retail for Genesis Energy in Auckland, New Zealand, having been General Manager Generation. His 11-year career history in the New Zealand electricity industry followed senior management positions in the UK coal mining industry. Other offices held have been First Vice President, Electricity Engineers Association of New Zealand; Director, Gas Association of New Zealand; and Member, Electricity Commission Retail Market Advisory Group, New Zealand. Mr Hawksworth is a Director of Roaring 40s Pty Ltd.

Mr Hawksworth has completed professional engineering qualifications and holds a Masters degree in Business Administration.

Michael Cavell (58) was appointed to the Board on 15 November 2006.

Mr Cavell is an energy consultant based in Brisbane and is Chairman of WestSide Corporation, a publicly listed coal seam gas exploration company with operations in Queensland and Indonesia. In addition, Mr Cavell is a Foundation Director of Litmus Research Associates, an organisation dedicated to independent research into strategic issues confronting Australian businesses. He has extensive energy industry experience in Australia and the United States and has held positions as CEO of Enertrade, Managing Director of Duke Energy's Asia Pacific operations, and Managing Director of PG&E Corporation's Australian business.

Prior to coming to Australia, Mr Cavell worked in senior positions for companies involved in oil and gas exploration and production and natural gas pipelines.

Saul Eslake (50) was appointed to the Hydro Tasmania Board on 17 March 2008.

Mr Eslake has been Chief Economist of Australia & New Zealand Banking Group (ANZ) since 1995. He is also Chair of the Tasmanian Arts Advisory Board, a non-executive Director of the University of Tasmania Foundation and the Tasmanian Education Foundation, and a member of the Commonwealth Government's National Housing Supply Council, Foreign Affairs Council, National Long Term Tourism Strategy Steering Committee, and Tourism Forecasting Committee. He holds an Honours degree in Economics from the University of Tasmania and a post-graduate Diploma in Applied Finance and Investment, and has completed the Senior Executive Program at the Columbia University Graduate School of Business in New York.

Mr Eslake is a Senior Fellow of the Financial Services Institute of Australia and a member of the Australian Institute of Company Directors.

Sally Farrier (44) was appointed to the Board on 13 December 2004.

Ms Farrier is a director of Farrier Swier Consulting, a director of Western Power, a member of the Victorian Water Trust Advisory Council and a member of the Gippsland Water Technical Review Committee. She specialises in energy and water reform, regulation, risk management and governance.

Ms Farrier has a Bachelor of Engineering, a Masters in Business Administration and a Postgraduate Diploma in Applied Finance and Investment Analysis. She is a Fellow of the Financial Services Institute of Australia and a member of the Australian Institute of Company Directors.

Janine Healey (49) was appointed to the Board on 9 September 2002.

Currently a Chartered Accountant with Ruddicks (Launceston, Tasmania), Ms Healey has wide-ranging commercial experience, particularly in the areas of commercial taxation advice, business structures, and planning and cash flow management. Ms Healey has a strong history of community and commercial involvement in Tasmania which includes serving as a member of the University of Tasmania Council Audit and Finance Committee (including a term as Chair), Treasurer of the Launceston Chamber of Commerce, Director of the Inveresk Railyard Development Authority (including Chair of the Audit Committee), Director of the Female Factory Historic Site Ltd in Hobart and Director and Chair of the Audit Committee of the Port of Launceston Pty Ltd. She was appointed as a Board member of the Tasmanian Electronic Commerce Centre Pty

Ltd (a joint venture between the Government of Tasmania and the University of Tasmania) during December 2006.

Her professional memberships include Fellow of the Taxation Institute of Australia, spending two years as Chairman of the Tasmanian Division and Fellow of the Institute of Chartered Accountants.

Stan Kalinko (66) was appointed to the Board on 25 June 2007.

Mr Kalinko has practised law for more than 30 years, specialising in corporate and commercial law, including initial public offerings (IPOs), takeovers and mergers and acquisitions with broad experience over a number of industries. He commenced his career in South Africa and for 16 years, until he retired on 30 June 2007, was a partner of the international law firm, Deacons.

Mr Kalinko is a fellow of the Australian Institute of Company Directors and also serves on the boards of FSA Group Limited, Indigenous Community Volunteers, Seisia Enterprises Pty Ltd and the Central Synagogue. Previously he served on Deacons' Sydney board for eight years and three years on its national board, and was chairman of the Sydney office for three years.

He has Bachelors of Laws and Commerce, a Higher Diploma in Tax and is an accredited mediator.



Gordon Dam

Table 25: 2007-08 Attendance at Board meetings

1 July 2007 to 30 June 2008	Ordinary meetings held while a Board member	Attended
Hon D Crean	12	12
V Hawksworth	12	12
K Baxter	4	3*
M Cavell	12	9*
S Eslake	4	3*
S Farrier	12	11*
J Healey	12	12
S Kalinko	12	12
M Willis	5	5

*Leave of absence was granted for meetings not attended.

Mr Baxter retired from the Board in November 2007 and Ms Willis in December 2007.

Board committees

The Committees of the Board play an important part in guiding the Corporation on specific governance issues. The Committees are able to give full attention to important issues and make informed recommendations to the full Board, which makes the final decisions. The Corporation Secretary attends all Board Committee meetings as Governance Executive. All committees meet at least quarterly.

The following show membership and a brief overview of the responsibilities of each Committee.

Audit Committee

J Healey (Chair), D Crean, S Eslake, S Farrier, with management support from S Halliday.

The Committee operates under an Audit Committee Terms of Reference with responsibilities including to:

- › oversee the external financial reporting by the Corporation and provide a review of financial information presented by management to regulators
- › oversee the scope and quality of audits conducted by the internal auditor
- › meet with external auditors to discuss audit scopes and results
- › determine the adequacy of the Corporation's systems of internal controls and compliance
- › receive reports and assurances on matters of compliance with laws, regulations and internal policy and review corrective actions taken.

Business Risk Committee

M Cavell (Chair), S Eslake, S Farrier, V Hawksworth, with management support from L Balcombe, J Minchin and M Smith.

The Committee's responsibilities are to:

- › ensure constant development of risk management principles throughout the organisation and advise the Board on risk management issues and strategies
- › sponsor the Integrated Business Risk Management (IBRM) program
- › review and consider the consolidated profile of Hydro Tasmania's major risks
- › review and endorse management policies of IBRM, Treasury, Marketing and Trading, and Dam Safety risk for Board approval
- › on behalf of the Board, monitor overall risk management performance.

Human Resources and Remuneration Committee

S Kalinko (Chair), D Crean, J Healey, V Hawksworth, with management support from S Krohn.

The Committee's responsibilities include to:

- › review and advise the Board on human resources management policies and strategies
- › oversee the annual safety plan and safety reports
- › review and advise the Board on employee relations
- › monitor the effectiveness of performance and development programs
- › review the performance and effectiveness of the Corporation's remuneration, benefits and succession planning strategies.

Environment and Sustainability Committee

S Kalinko (Chair), M Cavell, S Farrier, V Hawksworth, with management support from A Scanlon.

The Committee's responsibilities are to:

- › advise the Board on Hydro Tasmania's environment and sustainability policies
- › review the performance of Hydro Tasmania's Environmental and Sustainability Management System (ESMS)
- › review Hydro Tasmania's environment and sustainability programs and performance
- › examine strategic environment issues, including relations with stakeholders, new legislation and new government and industry initiatives
- › commission environment audits and studies to address issues of concern or to verify information.

Corporate Governance Committee

D Crean (Chair), M Cavell, V Hawksworth, S Kalinko with management support from A Evans, S Bendeich and L Balcombe.

The Committee's responsibilities are to:

- › review and advise the Board in relation to the Terms of Reference of Board Committees
- › monitor and report to the Board as appropriate on developments in duties of Hydro Tasmania directors and in corporate governance practices generally
- › monitor the application of Hydro Tasmania's constituent legislation (the *Government Business Enterprises Act* and the *Hydro-Electric Corporation Act*)
- › maintain and review, as necessary, Hydro Tasmania's Statement *Identifying the*

Guidelines for the Roles and Responsibilities within the Corporation

- › conduct and review, as necessary, Hydro Tasmania's processes for assessing whole of Board, Board Committee and individual director performance
- › sponsor continuous improvement in Board procedures and practices
- › monitor and review reporting of governance matters in Hydro Tasmania's Annual Report
- › develop for the consideration of the Board, corporate governance standards which will compare favourably with current best practice.



The Executive Team: From left, Lance Balcombe, Simon Krohn, Michael Brewster, Stephen Davy, Pat Lennon, Evangelista Albertini, Vince Hawksworth, Andrew Catchpole and Alan Evans

Executive Team

Business Development

General Manager, Pat Lennon:

Business Development is responsible for new business growth, core asset strategic assessment, delivery of business development-related strategic projects, and management of strategic investments including Roaring 40s. Business Development also facilitates Hydro Tasmania's research and development program, investigates new renewable technology opportunities, and facilitates identification and implementation of projects to optimise the use of Hydro Tasmania's water resource. Its general business model is to collaborate with all Hydro Tasmania business units to build project-specific, cross-functional teams comprising the best experience and expertise to deliver projects.

Business Performance

General Manager, Simon Krohn:

The purpose of the Business Performance team is to provide excellent, effective and quality services, systems and processes to Hydro Tasmania that balance costs and performance. These services will be continually improved to enhance business performance across the whole organisation. The team is integrating customer-focused strategies for information management, human resource management, safety, field environmental management and procurement.

Communications and External Relations

**General Manager,
Andrew Catchpole:**

Communications and External Relations shapes policy and stakeholder engagement for Hydro Tasmania's brand and profile as a renewable energy leader through programs for internal and external

communication, sustainability, energy and climate change policy, and market regulation. The team derives its purpose from the business strategy outcomes of renewable energy development, long-term business success, environmental policy and programs and a regulatory environment that minimises market risk.

Consulting

**General Manager,
Michael Brewster:**

Consulting operates under the brand name Hydro Tasmania Consulting with the vision 'to be the leading sustainable water and energy consultant in our chosen markets'. Hydro Tasmania Consulting provides clients in Tasmania, nationally and internationally with water and energy solutions in the key areas of environment and catchment management, renewable energy and power engineering.

Corporate Governance

General Manager and Corporation Secretary, Alan Evans:

Corporate Governance is responsible for establishing, maintaining and operating a best-practice governance framework and the provision of the secretariat function to the Corporation's Board, Board Committees and subsidiary companies. The team encompasses the Assurance group - a consolidation of the internal audit, risk and compliance functions formed in September 2006. The Corporate Governance team provides surety in corporate obligations for compliance and risk management through the implementation of a comprehensive enterprise risk management plan, audit and compliance programs, liaison with management on appropriate responses and reporting to the Board's Audit and Business Risk Committees.

Generation

**General Manager,
Evangelista Albertini:**

Generation's focus is to create production opportunities through sustainable, innovative and commercially responsible asset management. The core functions are to maintain, refurbish and operate the generating assets to optimise whole-of-life costs and performance while managing risk. The Generation team is focused on growing its people, being responsive to whole-of-business requirements, understanding the condition, performance and risks associated with the generating asset portfolio and developing a continuous improvement and 'no harm' culture.

Strategy and Finance

**General Manager,
Lance Balcombe:**

Strategy and Finance provides independent financial, commercial and legal advice and analysis to assist in building the financial strength and flexibility of Hydro Tasmania. The team leads business strategy, risk management, financial structuring and project and business financing for Hydro Tasmania's full investment portfolio.

Trading

General Manager, Stephen Davy:

Trading's function is to maximise the value of Hydro Tasmania's renewable generation portfolio in the National Electricity Market. The team meets the needs of Hydro Tasmania's customers for energy contracts and renewable energy products and manages water storages. The team works with Hydro Tasmania's network service providers, Basslink and Transend Networks, to ensure product delivery and with regulators and NEMMCO to ensure Hydro Tasmania is not disadvantaged in the market.





Lake Cethana

“The reliability of energy supplies in the State of Tasmania is our highest priority.”

Statement of Corporate Intent

This statement has been prepared pursuant to section 41 of the *Government Business Enterprises Act 1995*. It is a summary of the Corporate Plan for the next five years which is provided to the Tasmanian Government.

Business overview

Hydro Tasmania is a Government Business Enterprise. Our principal purpose as defined in our Ministerial Charter is to undertake the following activities:

- › the generation and trading of electricity
- › the provision of consulting services and other services in hydropower, environment and water management, and associated services and technologies

- › the conduct of scientific and commercial research in the above disciplines.

Hydro Tasmania’s principal objectives, as prescribed by the *Government Business Enterprises Act 1995* are to perform its functions and exercise its powers so as to be a successful business by:

- › operating in accordance with sound commercial practice and as efficiently as possible
- › achieving a sustainable commercial rate of return that maximises value for the State in accordance with the Corporate Plan and having regard to the economic and social objectives of the State.

In undertaking the principal objectives it is necessary for the Corporation to consider the balance between:

- › security and reliability of electricity supply



Hydro Tasmania owns 27 power stations and associated dams, canals and infrastructure on mainland Tasmania, at the following locations¹:

Table 26: Hydro Tasmania power stations constituting main undertakings

Bastyan	Lake Echo	Repulse
Butlers Gorge	Lake Margaret	Rowallan
Catagunya	Lemonthyme	Tarraleah
Cethana	Liapootah	Tods Corner
Cluny	Mackintosh	Trevallyn
Devils Gate	Meadowbank	Tribute
Fisher	Paloona	Tungatinah
Gordon	Poatina	Wayatinah
John Butters	Reece	Wilmot

Note: ¹The 27 power stations and associated dams, canals and infrastructure listed have special status pursuant to the Hydro-Electric Corporation Act 1995 and constitute Hydro Tasmania's main undertakings for the purposes of the Government Business Enterprises Act 1995.

- › the provision of support for development in the State of Tasmania (be it by direct investment or indirectly through the sale of energy at nationally competitive prices)
- › our financial performance and associated returns to Government.

The reliability of energy supplies in the State of Tasmania is our highest priority. The effect of adopting reliability of energy supplies as our highest priority is that when Tasmania encounters very low inflows, such as those currently being experienced, financial returns achieved by the business will suffer.

Our total generating capacity is 2510 MW. The value of our total power system is realised through trading electricity and energy products as a participant in the National Electricity Market.

In addition we own the King Island Huxley Hill Wind Farm and two diesel power stations on King and Flinders islands in Bass Strait. We have a Community Service Obligation, funded by the Tasmanian Government, to provide concessional arrangements to customers on the Bass Strait islands.

We hold further wind farm interests in Tasmania, South Australia, China and India as joint owner of Roaring 40s Pty Ltd with CLP Group.

Operating environment

Hydro Tasmania is currently in the midst of one of the most challenging periods in its operating history. Two years of very low inflows have extenuated our low storage situation further increasing the risk profile of the business. Storages continue to be carefully managed and the financial impacts are both immediate in terms of lower operating cash flow and prolonged due to the need to

invest in rebuilding our storages to levels which reduce our operating risk profile over the five-year planning period.

Statistical analysis undertaken by Hydro Tasmania indicates that inflows into our dams have been significantly lower over the past 11 years than for any other period for which records exist. As a result, we have de-rated the expected inflows into our system to 9000 GWh per annum. The de-rating has had flow-on impacts on our revenue projections and the underlying financial strength of the business.

The change in Federal Government has seen the announcement of significant policies affecting the electricity market including:

- › the proposed introduction of an emissions trading scheme by 2010
- › a targeted 60 per cent reduction in Australia's greenhouse gas emissions by 2050
- › a 20 per cent mandatory renewable energy target by 2010.

Hydro Tasmania, as Australia's largest producer of renewable energy, is well positioned to leverage

from the opportunities created by these policy directions.

Hydro Tasmania's market continues to change and is characterised by continued consolidation among market participants, increased levels of vertical and horizontal integration, and increased customer concern about climate change and strong positioning of leading industry players as 'green'. We are monitoring these developments in the National Electricity Market, including the outcomes from the proposed sale or lease of the NSW electricity assets which represent the largest near-term competitive threat to the business. We are paying particular attention to the impact on our competitive position to ensure the business remains relevant and a key player in what is a rapidly consolidating market.

The State and Federal Governments have also announced significant initiatives aimed at improving the security of water supplies. As water management is a fundamental attribute of our business, we see substantial opportunity for the Corporation to play a key role in assisting with Tasmanian-based projects generated as a result of these announcements.

Strategic direction

Key strategies

Hydro Tasmania has set its strategic priorities for the planning period to place the Corporation in the best position to maintain the security of Tasmania's energy supply and to respond to the rapidly evolving operating environment. Hydro Tasmania's key strategic priorities are:

- › world-class asset and resource management
- › building our financial strength and delivering sustainable returns to our owners, the people of Tasmania

- › developing new renewable energy projects
- › being the premier employer of the most capable people in our industry
- › product innovation for customers in consulting, electricity and green markets
- › becoming the first carbon neutral generator in Australia
- › being easy to do business with.

To underpin the achievement of our strategic priorities we have developed the following supporting strategies:

› High-level asset management strategy

- is designed to deliver on our priority to be a world-class asset manager by transitioning from asset maintainer to asset manager, and ensuring the safe and compliant operation of our assets while establishing 27 reliable production lines underpinning 70 per cent of our future revenue.

› Trading strategy

- seeks to improve the return on existing revenue streams through targeting higher returns and revenues from our customers by capturing the green/renewable premium on our energy. It also aims to manage sustainably our water resources by targeting storage rebuild and continued prudent water management.

› Consulting strategy

- is focused on increased revenue from new opportunities and existing revenue streams through enhanced capability and processes targeting external clients.

› Climate change strategy

- seeks to develop Tasmania's renewable energy potential over the long term through the enhancement of our asset base and generation system. It also

aims to effectively participate in the design of new green market and renewable schemes to achieve positive outcomes for the business. Importantly we aim to be Australia's first carbon neutral generator by 2012.

› Roaring 40s strategy

- Roaring 40s, Hydro Tasmania's renewable energy development joint venture with CLP Group is a key part of delivering our vision of being Tasmania's world-renowned renewable energy business. The potential for Roaring 40s to develop new wind farms in Australia has significantly improved with the commitment by the Federal Labor Government to the extension of the Mandatory Renewable Energy Target (MRET).

› Financial strategy

- Many of the above strategies are aimed at improving our financial returns and our underlying financial strength. The \$220 million equity injection received on 30 June 2008 has strengthened our underlying balance sheet and by reducing interest payments has improved our ongoing cash generation ability. The \$220 million equity injection addresses the imbalance of the debt allocation at the time of Hydro Tasmania's disaggregation. While it considerably improves the business' ability to withstand the volatility arising from hydrology and the fluctuations in its revenue as a result of NEM operations, Hydro Tasmania recognises that Ernst and Young's review of Hydro Tasmania's capital structure recommended an equity injection in the range of \$185 million to \$485 million. It also recommended that a

further capital structure review be undertaken in 2009. Our Corporate Plan is based on the equity injection of \$220 million, but we are preparing for the next review of our capital structure in 2009.

- As part of improving the business cash position, strategies for reducing costs have been developed. The cost-saving initiatives generated to date will deliver \$22.6 million in annual ongoing savings in support of our priority to reduce waste and costs.
- › **Water opportunities**
 - This strategy seeks to increase revenue from new opportunities in bulk water management and to assist in the establishment of a water market, while ensuring sustainable management of our catchments and water resources. A key aspect is to ensure the water used in these projects is valued according to a market price.
- › **1000 GWh project**
 - This project supports our priorities to be a world-class resource manager and sustainably manage our resources through the identification and prioritisation of opportunities to improve the energy yield from our existing Tasmanian system.
- › **Retail strategy**
 - This strategy is our response to the increasing level of consolidation in the NEM and seeks to gain access to the small to medium enterprises and major industrial section of the supply chain through establishing a Victorian retail presence. Hydro Tasmania has obtained ministerial approvals for entering retail in the National Electricity Market, outside Tasmania.



Survey: Assessing a trig point near the Gordon Dam

Balanced scorecard

Against the key strategies, a balanced scorecard has been developed as follows:

From a **financial perspective** the major issue is to improve our financial strength in order to increase the financial flexibility of the business.

From a **customer perspective** a key strategy is to get closer to the customer to allow access to a greater part of the value chain.

From an **internal process perspective** the overriding principle is that processes exist to maximise the long-term value created by our core assets.

From a **learning and growth perspective** the ability to learn quickly is an important priority for the business so we can be more agile with our strategic responses.

The strategy map (Figure 8) outlines Hydro Tasmania's key strategic aims.

Shareholder Perspective How do we want our owner to see us?	Increase revenue from new opportunities	Improve returns on existing revenue streams	World-class asset and resource manager	Sustainably managing our resources	Reducing waste Cost savings
Customer Perspective How do we want our customers/suppliers/partners to see us?	Easy to do business with	Our flexibility allows us to provide innovative solutions	Sustainable/ Renewable	Fair/Ethical/ Reliable	Value creating long-term relationships
Internal Process Perspective What processes do we have to excel at to deliver?	Understanding stakeholders' expectations Managing customer relationship cycle	Excellent processes for operation, asset management and service delivery	Management processes that ensure a clean and healthy environment	Health and safety performance (no harm to anyone at any time)	Deliver exceptional value and risk performance from renewable resources to market
Learning and Growth How can we sustain our ability to improve and change?	Develop and grow our people capability Work as one team	Our people understand and deliver our strategy	Simplify the way we do business	Create culture of knowledge sharing	

Figure 8: Hydro Tasmania's strategy map

Table 27: Hydro Tasmania's 5-year performance plan

	Current Year	Year 1	Year 2	Year 3	Year 4	Year 5
Financial Year Ending 30 June	2008	2009	2010	2011	2012	2013
<i>Safety</i>						
Lost Time Injury Frequency Rate	3.6	2	2	2	2	2
<i>Financial Summary</i>						
Profit (Loss) from Business Activities (\$M)	-58	8	25	44	75	87
Capital Expenditure (\$M)	55	73	82	80	79	75
Profit After Tax (\$M)	159	1	20	96	148	153
Key Indicators						
Tascorp Leverage Ratio	41%	41%	43%	43%	40%	38%
Tascorp Interest Cover Ratio	1.5	2.7	2.6	2.6	2.8	2.9
S&P FFO/Interest Cover	1.6	2.4	2.5	2.1	2.6	2.6
S&P FFO/Debt	3%	7%	8%	8%	11%	11%
<i>Returns to Government</i>						
Guarantee fee (\$M)	6	5	10	10	11	11
Income Tax Equivalent (\$M)	0	0	8	24	28	39
Ordinary Dividend (\$M)	0	0	1	4	6	16
Rates Equivalent (\$M)	4	4	4	4	4	4
Total (\$M)	10	9	23	42	49	70

Definition of key financial indicators

Tascorp Leverage Ratio – Gross debt divided by the sum of equity and gross debt. This is the same calculation as the S&P gearing ratio.

Tascorp Interest Cover Ratio – EBITDA divided by net interest expense (interest expense plus guarantee fee less interest revenue).

S&P FFO/Interest Cover Ratio – Operating cash (excluding interest expense) divided by net interest expense.

S&P FFO/Total Debt – Operating cash divided by gross debt.



Rongcheng Wind Farm, Shandong Province, China

Roaring 40s

Hydro Tasmania and the CLP Group own the renewable energy development company Roaring 40s Pty Ltd as a 50/50 joint venture. This business, based in Hobart, Tasmania, has a portfolio of wind farm projects in Australia and overseas of approximately 1327 MW currently in operation or under development.

Roaring 40s provides this information to address the interests of the Tasmanian community.

Summaries of the Roaring 40s portfolio are provided in Table 28 and Table 29. These projects demonstrate that Roaring 40s is on track to attain its strategic business target of achieving a minimum portfolio of 1000 equity MW of wind energy assets in Asia and Oceania by 2010. Beyond 2010, Roaring 40s will continue to develop its renewable energy portfolio throughout Asia and Oceania as well as investigating potential new markets for further renewable energy developments.

Table 28: Summary of Roaring 40s Wind Farm Portfolio – Australia

Name	Location	MW	Status
Woolnorth Bluff Point	North-west Tasmania	65	Fully commissioned
Woolnorth Studland Bay	North-west Tasmania	75	Fully commissioned
Cathedral Rocks	Eyre Peninsula, South Australia	66	Fully commissioned
Total		206	
Musselroe	North-east Tasmania	129	Approved
Waterloo	Clare Valley, South Australia	114	Approved
Sidonia Hills	Kyneton, Victoria	68	Planning application
Robertstown	Robertstown, Victoria	100	Development application
Stony Gap	Stony Gap, Victoria	130	Development application
Spring Hill Tier	Midlands, Tasmania	32	Feasibility
Total		573	
Total for Australia		779	

Table 29: Summary of Roaring 40s Wind Farm Portfolio – Asia

Name	Location	MW	Status
Shuangliao	Maolin, Jilin Province, China	49.5	Fully commissioned
Rongcheng	Shandong Province, China	49	Fully commissioned
Total		98.5	
Datang	Jilin Province, China	49.5	Under construction
Dongying Lijin	Shandong Province, China	50	Under construction
Binzhou Zhanhua	Shandong Province, China	50	Under construction
Dongying Hekou	Shandong Province, China	50	Under construction
Khandke	Maharashtra State, India	50.4	Under construction
Total		249.9	
Shuangliao Stage 2	Maolin, Jilin Province, China	49.5	Under development
Lijin Phase 2	Shandong Province, China	50	Under development
Zhanhua Phase 2	Shandong Province, China	50	Under development
Hekou Phase 2	Shandong Province, China	50	Under development
Total		199.5	
Total for Asia		547.9	

In relation to its Australian operations, Roaring 40s continues to engage with key stakeholders, including local councils, State and Commonwealth Government departments, landowners and other community organisations.

The impact on birds of Tasmanian wind developments is closely monitored and assessed by regular field surveys. Roaring 40s has committed considerable investment into understanding, conducting research and implementing mitigation strategies to reduce the impact of its operations on birds. Roaring 40s has also initiated other programs aimed at providing enhanced habitat for bird species and increasing the public's awareness of specific species. Some examples of its commitments and programs include:

- › specific species management plans
- › bird behaviour and observational research

- › establishing feeding and roosting habitat areas for the orange-bellied parrot
- › protecting eagle nest sites with formal reserves and conducting eagle nest surveys and searches across Tasmania
- › training Roaring 40s' and other site personnel in bird observations
- › managing turbine operation to reduce collision risk.

Roaring 40s maintains a strong working relationship with Tasmania's Department of Tourism, Arts and the Environment, the Commonwealth Department of Environment and Water and community organisations to ensure that all Roaring 40s' Tasmanian wind energy developments are managed in accordance with strict permit requirements and to an industry leading practice.

Environmental management, including occurrence response, assessment and planning, operational management and permit

compliance auditing, is carried out in accordance with the ISO 14001 environmental management system standard. Roaring 40s sought and gained accreditation under this standard in December 2007.

Workforce safety is managed by the company safety management system GENSafe. Roaring 40s sought and gained accreditation to AS4801 across all Tasmanian sites in December 2007 and plans to seek further accreditation of all remaining Australian sites in the future. Roaring 40s has a Safety and Environment Team, responsible officers and an Occurrence Management System to manage safety and environmental occurrences.

In relation to its overseas activities, Roaring 40s aligns itself with proven industry partners and ensures those partners are provided with appropriate business support, specifically in the areas of technical support, occupational health and safety and environment.

Roaring 40s, in cooperation with its joint venture partners, is implementing safety and environmental initiatives to improve upon local regulatory requirements in its overseas operations. Initiatives and areas for improvement have been identified through six-monthly site audits of construction and operational sites. Examples include implementation of a Safety Management Plan, a Site Environmental Management Plan, recording and management of site safety occurrences and minimum standards for personal protective equipment. Alignment of overseas joint venture projects with its Australian safety and environmental management systems is a medium to long-term objective for Roaring 40s.

ABOUT THIS REPORT





Lake Pieman Dam

ABOUT THIS REPORT



This is the second year Hydro Tasmania has integrated legal requirements and sustainability principles into our Annual Report for a seamless record of our economic, social and environmental performance. For the two years prior, the Annual Report contained the Sustainability Report as a distinct section.

This report covers the period from 1 July 2007 to 30 June 2008. Reference to activities outside this period is occasionally made where it is appropriate and relevant to the topic and in these cases the date is specified. All data quoted is for the financial year unless stated otherwise. All references to 'this year' refer to 2007-08 financial year. Any data presented as a whole year, e.g. 2008, refers to the financial year 2007-08. Similarly, any reference to 'last year' means 2006-07 financial year.

The content of the report is determined by the *Government Business Enterprises Act 1995 (GBE Act)* and Hydro Tasmania's

commitment to reporting performance in our Sustainability Code. We provide information from the self-assessment of our business sustainability which is framed by the Code and based on the International Hydropower Association Sustainability Assessment Protocol. We also address the Global Reporting Initiative's G3 guidelines and the pilot Electricity Utilities Supplement.

A summary for this is contained in the GRI index **P63**.

The content of this report is influenced by our primary reading audience, the Government of Tasmania as the shareholder and other public representatives of the Tasmanian community, the ultimate owners of Hydro Tasmania. We consider also the various interests of other stakeholders involved in the performance and operations of Hydro Tasmania and in the electricity industry and its associated interests whether in the State, national or international arenas.

Priority for the content of this Report

was decided by taking the top 10 issues from two materiality lists, one which identified materiality issues during a review of key performance indicators across the business and another from the survey of stakeholders taken in preparation for the 2006-07 Annual Report. The survey was considered by Hydro Tasmania to be relevant still, given that conditions for operation were similar; only one new major condition had appeared and no new issues had been raised during the reporting period. The sustainability self-assessment data provided another source. These sources identified similar issues.

As required by the *GBE Act*, Hydro Tasmania includes the *Statement of Corporate Intent*, a summary of the Corporate Plan which is presented to the Tasmanian Government in May of the reporting year to show intent for the next five years. The Act also requires financial statements, a copy of the opinion of the Auditor-General and a report on operations, information on performance and operations, including data from subsidiaries.

This year we received no feedback from readers on the 2006-07 report, which has provided valuable suggestions in the past. The feedback form is on **P157**.

This report includes information and data on Hydro Tasmania and its controlled subsidiaries Bell Bay Power Pty Ltd, Lofty Ranges Power Pty Ltd, Bell Bay Three Pty Ltd, RE Storage Project Holdings Pty Ltd, HT Consulting (Holding) Pty Ltd and does not include Hydro Tasmania Consulting India Private Limited.

Lofty Ranges Power Pty Ltd holds a 50 per cent stake in a South Australian mini-hydro scheme joint venture. Data from the joint venture is in the financial statements.

Roaring 40s, a 50/50 joint venture with the CLP Group for renewable energy developments, has provided information for this report on its management approach and a narrative of the company's sustainability issues and makes specific note of its activities in Tasmania to address the interests of the Tasmanian community **P83**.

Changes to report content

The Report is similar to the previous year. Changes made to the Sustainability Code during 2007-08 are reflected in the content changes for performance indicators as presented in the summary table on **P61**.

Some scores from 2006-07 have been accordingly adjusted.

Figures for greenhouse gas emissions from 2006-07 are restated on **P51**.

Contact

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- 1 Exit all other open applications.
- 2 Insert the CD. If the CD doesn't self start, click on the file 'hydro_ar.html'.

Minimum system requirements

PC

Windows 2000
Pentium 400Mhz
64MB RAM
1024 x 768 resolution
32Bit colour
8x CD-ROM

Mac

OSX 10.2
G3 350Mhz
64MB RAM
1024 x 768 resolution
32Bit colour
8x CD-ROM

